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Water Resources Data for Ohio
Water Year 1971. Part II
Water Quality Records

(U.S.) Geological Survey, Columbus, OH Water Resources Div

1972

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1971

Water Resources Data for Ohio

Water Year 1971

Part 2. Water Quality Records

MARCH 3, 1849

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UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-71-2

Prepared in cooperation with the State of Ohio
and with other agencies

CALENDAR FOR WATER YEAR 1971

OCTOBER 1970

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
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NOVEMBER 1970

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29	30					

DECEMBER 1970

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27	28	29	30	31		

JANUARY 1971

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3	4	5	6	7	8	9
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17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

FEBRUARY 1971

S	M	T	W	T	F	S
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28						

MARCH 1971

S	M	T	W	T	F	S
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21	22	23	24	25	26	27
28	29	30	31			

APRIL 1971

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
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MAY 1971

S	M	T	W	T	F	S
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23	24	25	26	27	28	29
30	31					

JUNE 1971

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
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20	21	22	23	24	25	26
27	28	29	30			

JULY 1971

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				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

AUGUST 1971

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

SEPTEMBER 1971

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

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Water resources data for the 1971 water year for Ohio consist of records of discharge and water quality of streams, and water quality of lakes and reservoirs. This report contains water quality for 77 gaging stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating local, State, and Federal agencies in Ohio.

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Water Resources Data for Ohio Water Year 1971

Part 2. Water Quality Records

MARCH 3, 1849

UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-71-2

Prepared in cooperation with the State of Ohio
and with other agencies

Prepared in cooperation with

Ohio Department of Natural Resources,
Division of Water
Ohio Department of Health
Miami Conservancy District
Three Rivers Watershed District
Corps of Engineers, U.S. Army
Environmental Protection Agency

Water resources records, 1971, for Ohio are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Ohio, Part 1. Surface Water Records
2. Water Resources Data for Ohio, Part 2. Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
975 West Third Avenue
Columbus, Ohio 43212

1972

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WATER RESOURCES DATA FOR OHIO, 1971

Part 2. Water Quality Records

INTRODUCTION

Water resources data for the 1971 water year for Ohio include records of data for the chemical and physical characteristics of surface and ground water. Data on the quality of surface water (chemical, temperature, and sediment) were collected from designated sampling sites at predetermined intervals such as once daily, weekly, monthly or less frequently, and at some sites data were recorded continuously either on a strip chart or on punched paper tape at 60-minute intervals. Locations of surface water-quality stations are shown in Figure 1. The records were collected by the Water Resources Division of the U.S. Geological Survey under the direction of J. J. Molloy, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Ohio.

The Geological Survey has published records of chemical quality, water temperatures, and sediment since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Beginning with the 1964 water year, water-quality records have been released by the Geological Survey in annual reports on a State-boundary basis. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year. These records will be published later in Geological Survey water-supply papers.

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

Ohio Department of Natural Resources, F. E. Morr, director, succeeded by W. B. Nye; and C. V. Youngquist, chief, Division of Water, succeeded by Roy Winkle.

Ohio Department of Health, E. W. Arnold, director, succeeded by T. A. Gardner, acting director; and G. H. Eagle, chief engineer, succeeded by J. E. Richards, acting chief engineer.

Miami Conservancy District, L. B. Coy, general manager and secretary.

Three Rivers Watershed District, G. H. Watkins, secretary-treasurer.

Agencies furnishing assistance were:

Corps of Engineers, U.S. Army.
Environmental Protection Agency.

DEFINITION OF TERMS

Terms related to water-quality and hydrologic data, as used in this report, are defined as follows:

Bed material is the shifting portion of fragmented alluvial material of which the streambed is composed.

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, or about 646,000 gallons, and represents a runoff of approximately 0.0372 inch from 1 square mile.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 milliliters is determined by the immediate or delayed incubation membrane filter method.

Cubic foot per second (cfs,CFS) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, total fluids) that passes a given point within a given period of time.

Mean discharge is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (cfs)."

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalert calcium carbonate ($CaCO_3$).

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per liter (ug/l,UG/L) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (mg/l,MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one-thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1, page 5. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million (ppm) by using the factors in table 2, page 5.

Odor is reported in terms of the threshold number which is the dilution ratio at which odor is just detectable.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling) (Guy, 1969).

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*...	0.11119	Hydroxide (OH^{-1})..	0.05880
Ammonia as $NH_4{}^{+1}$...	.05544	Iodide (I^{-1})......	.00788
Arsenic (AS^{+3}).....	.04004	Iron (Fe^{+3})*......	.05372
Barium (Ba^{+2})......	.01456	Lead (Pb^{+2})*......	.00965
Bicarbonate ($HCO_3{}^{-1}$)	.01639	Lithium (Li^{+1})*...	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2})..	.08226
Cadmium (Cd^{+2}).....	.01779	Manganese (Mn^{+2})*.	.03640
Calcium (Ca^{+2}).....	.04990	Nickel (Ni^{+2})*....	.03406
Carbonate ($CO_3{}^{-2}$)..	.03333	Nitrate ($NO_3{}^{-1}$)...	.01613
Chloride (Cl^{-1})....	.02821	Nitrite ($NO_2{}^{-1}$)...	.02174
Chromium (Cr^{+6})*...	.11539	Phosphate ($PO_4{}^{-3}$).	.03159
Cobalt (Co^{+2})*.....	.03394	Potassium (K^{+1})...	.02557
Copper (Cu^{+2})*.....	.03148	Sodium (Na^{+1}).....	.04350
Cyanide (CN^{-1}).....	.03844	Strontium (Sr^{+2})*.	.02283
Fluoride (F^{-1}).....	.05264	Sulfate ($SO_4{}^{-2}$)...	.02082
Hydrogen (H^{+1}).....	.99209	Zinc (Zn^{+2})*......	.03060

*Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Particle-size classification, used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water.

Sediment is solid material that originates mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or by volume, that is discharged during a given time (Colby and Hembree, 1955).

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/l).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Turbidity is the reduction of transparency of a liquid due to the presence of suspended particulate matter.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

International Hydrological Decade (IHD) River Stations provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United States, IHD stations provide indices of runoff and the general distribution of water in the principal river basins of the conterminous United States and Alaska.

Pesticide program is a network of water-quality stations where periodic samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could resuld from the application of the commonly used insecticides and herbicides.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each water-quality station, gaging station, and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 03276600 which appears just to left of the station name includes the two-digit part number "03" plus the six-digit downstream order number "276600". In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 3 (Ohio River basin) and Part 4 (St. Lawrence River basin). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

WELL NUMBER

The well numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The number consists of 14 digits and one letter. The first 6 digits denote the degrees, minutes, and seconds of latitude followed by a letter denoting north or south. Seven digits following the letter denote degrees, minutes, and seconds of longitude. The last digit is a sequential number for wells within a 1-second grid. The system provides the geographic location of the well and a unique number for each well.

COLLECTION AND EXAMINATION OF DATA

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads. Discharge records for streams in Ohio have been released in the report, "Water Resources Data for Ohio, 1971, Part 1. Surface Water Records."

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations. For ground-water sampling stations, no descriptive statements are given. However, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of ground water.

Water-quality information is presented for chemical quality, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, specific conductance, and pH. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder furnishes information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per liter (mg/l), and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. (See table 2 on page 5.) To convert temperature in degrees Celsius to degrees Fahrenheit, see table 3 below.

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

In October 1968 the Geological Survey began reporting many of the chemical constituents, as well as the minor elements, in micrograms per liter instead of milligrams per liter. (See "Definitions of Terms," p. 4.)

Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge depending on the source of material and the turbulence and the mixing of the stream. Some must be sampled at several verticals across the channel to determine accurately the solute load.

For stations at which samples were collected once each day, analyses were made of the samples having the maximum, minimum, and median dissolved-solids content each month, as indicated by measurements of the specific conductance of each daily sample. Samples collected at weekly or monthly intervals and at partial-record stations were analyzed individually.

At chemical-quality stations where continuous recording instruments are installed, the records consist of daily maximum and minimum values for each constituent measured.

Ground water does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site. Water samples from wells are analyzed individually.

Temperature

Water temperatures are measured at most of the water-quality stations. For daily stations, the water temperatures are taken at about the same time each day when the sample is collected. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and the monthly averages.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross-section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the sub-divided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

WATER-SUPPLY PAPERS

The annual series of water-supply papers that give information on quality of surface waters in Ohio are shown in the following table.

Table 4.--Water-supply paper numbers and parts, water years 1947-70

Water year	WSP No.	Water year	Parts 3-4	WSP No.
1941	942	1958	-----	1571
1942	950	1959	-----	1642
1943	970	1960	-----	1742
1944	1022	1961	-----	1882
1945	1030	1962	-----	1942
1946	1050	1963	-----	1948
1947	1102	1964	-----	1955
1948	1132	1965	-----	1962
1949	1162	1966	-----	1992
1950	1186	1967	-----	2012
1951	1197	A1968	Part 3	2093
1952	1251		Part 4	2094
1953	1290	A1969	Part 3	2143
1954	1350		Part 4	2144
1955	1400	A1970	Part 3	2153
1956	1451		Part 4	2154
1957	1520			

A In preparation

SELECTED REFERENCES

American Public Health Association, and others, 1971, Standard methods for the examination of water and wastewater, 13th ed.: Am. Public Health Assoc., New York, 874 p.

Brown, Eugene, Skougstad, M. W., and Fishman, M. J., 1970, Methods for collection and analysis of water samples for dissolved minerals and gases: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A1, 160 p.

Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurement of sediment discharge: U.S. Geol. Survey Bull. 1181-A, 47 p.

Colby, B. R., and Hembree, C. H., 1955, Computations of total sediment discharge, Niobrara River near Cody, Nebraska: U.S. Geol. Survey Water-Supply Paper 1357, 187 p.

Colby, B. R., and Hubbell, D. W., 1961, Simplified methods for computing total sediment discharge with the modified Einstein procedure: U.S. Geol. Survey Water-Supply Paper 1593, 17 p.

Guy, H. P., 1970, Fluvial sediment concepts: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C1, 55 p.

____, 1969, Laboratory theory and methods for sediment analysis: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C1, 58 p.

Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluvial sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C2, 59 p.

Hem, J. D., 1970, Study and interpretation of the chemical characteristics of natural water, revised edition: U.S. Geol. Survey Water-Supply Paper 1473, 363 p.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

Porterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geol. Survey Techniques of Water Resources Inv., book 3, chap. C3, 66 p.

Ritter, J. R., and Helley, E. J., 1969, Optical method for determining particle sizes of coarse sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C3, 33 p.

U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.

_____1941, Methods of analyzing sediment samples: Rept. 4.

U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.

_____1953, Accuracy of sediment size analyses made by the bottom-withdrawal-tube method: Rept. 10.

_____1957, The development and calibration of visual accumulation tube: Rept. 11.

_____1957, Some fundamentals of particle-size analysis: Rept. 12.

_____1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA.

_____1961, The single stage sampler for suspended sediment: Rept. 13.

_____1963, Determinations of fluvial sediment discharge: Rept. 14.

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BEAVER RIVER BASIN

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OHIO

LOCATION.--Lat 41°09'41", long 81°11'50", in T.3 N., R.8 W., Portage County, at gaging station on left bank at downstream side of bridge on Newton Falls Road, 2.5 miles east of Ravenna.

DRAINAGE AREA.--21.8 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1967-71 (partial-record station).
Water temperatures: October 1965 to September 1971.

EXTREMES.--1970-71:
Water temperatures: Maximum, 26.5°C June 28; minimum, freezing point on many days during January to March.

Period of record:
Water temperatures: Maximum, 28.0°C Aug. 24, 1968; minimum, freezing point on many days during winter periods.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
NOV. 19...	19	--	--	--	--	--	--	--	--	--	318	--
DEC. 21...	20	--	--	--	--	--	--	--	--	--	316	--
FEB. 19...	202	--	--	29	50	--	7.4	--	--	70	294	6.5
APR. 19...	13	--	--	49	37	--	2.2	--	--	140	378	8.1
JUNE 15...	3.4	--	--	--	--	--	--	--	--	--	412	--
AUG. 20...	1.2	--	--	56	28	--	2.2	--	--	220	507	7.7
SEP. 23...	8.2	102	0	54	25	.2	2.2	.23	216	140	350	7.5

DATE	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ARSENIC (AS) (UG/L)
OCT. 7, 1970..	69	4.3	0	0	120	6.0	0
JUNE 2, 1971..	--	2.2	--	--	--	59	--

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	12.0	13.0	11.5	8.0	5.5	0.5	0.5	0.5	0.5	4.0	1.5
2	15.5	11.5	12.0	11.5	8.0	6.5	0.5	0.5	0.5	0.5	4.0	1.5
3	14.5	13.0	12.0	9.5	7.0	5.5	0.5	0.5	0.5	0.5	2.0	0.5
4	13.0	11.5	9.5	9.0	8.0	4.5	0.5	0.5	0.5	0.5	0.5	0.5
5	13.0	11.0	9.0	8.5	4.5	3.5	0.5	0.5	0.5	0.0	1.0	0.5
6	15.0	12.5	9.0	8.5	3.5	1.0	0.5	0.5	0.0	0.0	1.5	0.5
7	14.5	13.0	9.5	8.0	1.0	0.5	0.5	0.5	0.0	0.0	1.5	0.5
8	15.5	13.5	8.5	7.0	1.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5
9	17.0	15.0	9.5	8.0	3.5	1.5	0.5	0.5	0.0	0.0	0.5	0.0
10	16.5	14.5	10.5	9.5	4.0	3.5	0.5	0.5	0.0	0.0	0.5	0.0
11	14.5	13.5	10.5	10.0	3.5	3.5	0.5	0.5	0.0	0.0	1.5	0.5
12	15.0	14.0	10.5	10.5	3.5	3.5	0.5	0.5	0.0	0.0	3.0	0.5
13	16.5	15.0	10.5	9.5	3.5	3.0	0.5	0.5	0.0	0.0	2.0	1.0
14	16.5	16.0	9.5	8.0	3.0	2.0	0.5	0.0	0.5	0.0	5.0	0.5
15	16.0	13.0	---	---	2.0	1.0	0.5	0.0	0.5	0.0	6.5	5.0
16	13.0	9.5	---	---	1.0	1.0	0.5	0.5	0.0	0.0	6.0	3.0
17	10.5	9.0	---	---	1.	1.0	0.5	0.5	0.0	0.0	3.0	1.5
18	10.5	8.5	---	---	1.5	1.5	0.5	0.5	0.0	0.0	3.0	0.5
19	10.5	8.5	5.0	4.0	3.0	1.5	0.5	0.5	0.0	0.0	3.5	2.0
20	10.5	9.0	6.5	4.5	3.0	1.5	0.5	0.5	0.0	0.0	2.5	1.0
21	11.0	10.5	6.0	5.0	1.5	1.0	0.5	0.5	0.0	0.0	4.0	0.5
22	12.0	11.0	5.5	5.0	1.5	1.0	0.5	0.5	0.0	0.0	3.0	2.0
23	12.0	11.0	5.0	0.5	3.0	1.5	0.5	0.5	0.0	0.0	2.0	1.0
24	11.5	10.5	0.5	0.5	3.0	0.5	0.5	0.5	0.5	0.0	3.5	0.5
25	12.0	10.0	0.5	0.5	0.5	0.5	0.5	0.5	3.0	0.5	2.5	0.5
26	11.5	11.0	0.5	0.5	0.5	0.5	0.5	0.5	3.0	0.5	4.5	0.5
27	11.5	10.0	3.5	0.5	0.5	0.5	0.5	0.5	3.5	2.0	5.5	1.0
28	11.5	10.0	5.0	3.5	0.5	0.5	0.5	0.5	3.5	1.5	6.5	4.0
29	11.0	10.5	6.0	5.0	0.5	0.5	0.5	0.5	---	---	6.0	4.0
30	11.5	11.0	6.0	5.5	0.5	0.5	0.5	0.5	---	---	5.0	3.0
31	12.0	11.5	---	---	0.5	0.5	0.5	0.5	---	---	7.0	1.5
MONTH	17.0	8.5	13.0	0.5	8.0	0.5	0.5	0.0	3.5	0.0	7.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	5.0	8.5	5.5	18.0	14.5	24.5	22.0	21.0	17.0	20.5	18.0
2	8.0	6.0	8.0	6.0	18.0	15.5	24.0	20.5	21.5	18.5	21.0	18.5
3	6.0	4.0	10.0	6.0	19.5	15.5	23.0	18.5	21.0	20.0	21.0	19.0
4	6.5	2.5	11.5	5.5	21.0	16.0	22.0	18.0	20.5	18.5	22.0	20.0
5	6.0	2.5	12.0	9.0	21.5	17.0	22.0	19.5	21.0	16.5	23.0	20.0
6	6.0	2.5	11.5	9.0	20.5	18.5	24.0	21.0	21.5	16.5	23.5	20.0
7	8.5	2.5	11.5	8.5	21.0	19.0	24.5	19.5	22.0	16.5	22.0	20.5
8	9.5	3.5	14.0	10.0	19.5	17.0	23.5	20.0	22.0	17.0	23.5	19.5
9	11.5	5.5	14.0	9.0	18.0	15.5	24.0	21.0	23.0	18.0	23.0	20.0
10	11.5	6.5	16.5	9.5	19.5	14.0	23.0	20.0	21.0	20.0	21.0	18.5
11	12.0	5.0	15.5	11.0	19.5	15.0	21.0	19.0	22.0	20.0	21.0	19.0
12	14.0	6.5	15.0	11.0	19.0	17.0	22.0	19.0	22.0	18.0	20.0	19.0
13	13.5	10.0	11.0	9.0	22.0	17.0	21.0	18.5	22.0	16.5	19.0	17.0
14	10.5	8.0	15.5	8.0	20.5	18.5	22.0	18.5	22.0	17.0	18.5	17.0
15	9.5	5.5	16.0	9.5	20.0	18.0	21.5	18.0	22.0	19.5	19.0	16.5
16	13.0	6.0	16.0	12.0	21.0	17.0	22.0	18.0	23.0	18.5	18.0	15.5
17	10.5	8.0	19.5	11.5	21.0	16.5	21.5	19.0	22.0	17.0	16.5	15.5
18	14.0	8.5	21.0	14.0	21.5	17.0	21.0	17.0	22.0	17.0	18.0	15.0
19	13.0	9.0	21.5	16.0	23.0	19.0	21.0	19.0	22.0	18.0	17.0	16.0
20	13.5	6.5	20.0	16.5	24.5	20.0	20.5	17.0	21.0	20.0	18.0	16.5
21	11.0	8.0	18.0	14.0	23.5	19.5	21.0	16.5	23.0	19.0	16.5	15.0
22	8.0	5.5	18.0	11.5	21.5	18.5	21.5	18.0	23.5	19.0	15.5	13.5
23	10.5	3.5	18.0	11.0	22.0	17.0	21.5	18.5	23.0	19.5	15.5	14.0
24	8.0	5.5	16.0	13.5	23.0	18.5	21.0	19.0	20.5	16.5	15.0	13.5
25	8.5	4.5	15.5	14.0	23.0	20.0	21.5	18.0	19.0	16.5	13.5	11.0
26	7.0	5.5	14.0	11.0	22.0	20.5	21.0	19.0	23.0	18.0	13.5	13.0
27	6.5	3.5	11.0	10.0	24.0	19.5	21.0	18.0	18.5	17.0	15.0	13.5
28	10.5	6.0	13.0	9.0	26.5	21.5	20.5	17.0	18.5	17.0	17.0	15.0
29	9.0	6.5	15.5	10.0	25.0	20.5	21.5	19.5	19.5	16.5	19.0	16.5
30	9.0	6.0	19.0	11.0	24.5	21.5	20.0	18.0	20.0	16.5	18.5	16.5
31	---	---	18.5	13.0	---	---	20.5	16.5	21.0	17.0	---	---
MONTH	14.0	2.5	21.5	5.5	26.0	14.0	24.5	16.5	23.5	16.5	23.5	11.0
YEAR	26.5	0.0										

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO

LOCATION.--Lat 41°14'22", long 80°52'56", Trumbull County, on left bank 10 ft upstream from Ohio Edison Company diversion dam, 30 ft upstream from Duck Creek, and 300 ft upstream from gaging station at bridge on Leavitt Road in Leavittsburg.

DRAINAGE AREA.--542 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1953, July 1967 to September 1968 (published as "at Leavittsburg"), October 1968 to September 1971.
Water temperatures: October 1949 to September 1968 (published as "at Leavittsburg"), October 1968 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 622 micromhos Feb. 5; minimum, 151 micromhos Feb. 24.
pH: Maximum, 8.0 Apr. 13-15, 17; minimum, 6.2 Dec. 26, 27, Jan. 4.
Dissolved oxygen: Maximum, 14.6 mg/l Dec. 29; minimum, 4.2 mg/l June 12, 13.
Water temperatures: Maximum, 25.5°C Sept. 7; minimum, freezing point on many days during December to February.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)
OCT.											
08...	15[illegible]5	238	109	0	89	91	30	.2	3.0	278	180
24...	0840	290	115	0	94	100	30	.3	2.6	320	200
NOV.											
03...	0700	402	106	0	87	98	30	.2	2.7	282	180
04...	1400	558	--	--	80	--	26	--	--	--	160
17...	0715	1030	52	0	43	62	16	.5	4.4	176	100
DEC.											
01...	0720	980	70	0	57	84	22	.3	4.1	230	130
03...	1400	790	--	--	74	--	24	--	--	--	180
29...	1545	1000	99	0	81	120	25	.6	5.0	312	180
JAN.											
06...	0730	1020	53	0	43	55	20	.4	5.1	176	100
13...	1500	363	--	--	84	--	26	--	--	--	190
30...	0900	226	115	0	94	110	28	.3	6.8	338	210
FEB.											
02...	0715	190	116	0	95	110	29	.3	6.8	316	210
17...	1315	366	--	--	69	--	38	--	--	--	180
23...	0715	2420	33	0	27	44	17	.2	4.7	126	74
MAR.											
06...	0730	2500	70	0	57	80	23	.2	6.8	242	150
11...	1500	1300	--	--	52	--	27	--	--	--	140
16...	0730	1700	49	0	40	56	20	.2	5.8	170	100
APR.											
03...	1300	420	54	0	44	72	26	.2	3.8	246	140
08...	0830	244	--	--	64	--	26	--	--	--	150
27...	0715	211	88	0	72	86	27	.3	3.5	292	160
MAY											
04...	0730	208	90	0	74	90	25	.2	3.5	253	160
05...	1215	202	--	--	69	--	26	--	--	--	150
08...	0800	553	70	0	57	67	25	.2	3.4	206	120
JUNE											
02...	1730	--	--	--	--	--	--	--	--	--	--
03...	1315	202	--	--	70	--	30	--	--	--	150
10...	1945	193	80	0	66	60	23	.2	5.6	214	130
25...	0830	244	90	0	74	74	31	.2	5.7	228	150
JULY											
06...	0715	282	80	0	66	74	29	.2	3.8	222	150
08...	1200	276	--	--	65	--	26	--	--	--	140
10...	1030	272	86	0	71	74	30	.2	3.9	234	160
AUG.											
03...	0725	300	86	0	71	84	29	.2	3.4	250	160
04...	1230	297	--	--	69	--	30	--	--	--	160
18...	0715	265	89	0	73	98	31	.2	3.4	266	180
SEP.											
02...	1215	293	--	--	71	--	30	--	--	--	160
14...	1815	486	102	0	84	80	28	.2	3.4	260	160
28...	0715	265	102	0	84	90	32	.2	2.6	282	170

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-71): Maximum, 700 micromhos Nov. 12, 13, 1969; minimum, 151 micromhos Feb. 24, 1971.
pH (1970-71): Maximum, 8.0 Apr. 13-15, 17, 1971; minimum, 6.2 Dec. 26, 27, 1970, Jan. 4, 1971.
Dissolved oxygen (1970-71): Maximum, 14.6 mg/l Dec. 29, 1970; minimum, 4.2 mg/l June 12, 13, 1971.
Water temperatures (1949-67, 1969-71): Maximum, 28.0°C June 29, 30, 1952; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since July 1967. Maximum recorded specific conductance value of 780 micromhos occurred May 27, 1969. Maximum recorded pH of 8.5 occurred Aug. 5, 1968. Minimum recorded pH of 5.8 occurred Nov. 22, 23, 29, 31, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. A special sample was collected each month as part of the Environmental Protection Agency national network. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for 03094000 Mahoning River at Leavittsburg, Ohio (drainage area 575 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	IMMEDIATE COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.											
08...	90	455	2.2	16	3	8.2	85	360	4400	7.0	6.2
24...	110	487	--	--	--	--	--	--	--	--	--
NOV.											
03...	93	466	--	--	--	--	--	--	--	--	--
04...	--	470	3.4	16	7	8.8	81	2300	16000	--	--
17...	58	273	--	--	--	--	--	--	--	--	--
DEC.											
01...	72	351	--	--	--	--	--	--	--	--	--
03...	--	440	1.6	18	9	12.0	97	750	6800	--	--
29...	99	467	--	--	--	--	--	--	--	--	--
JAN.											
06...	56	289	--	--	--	--	--	--	--	--	--
13...	--	485	2.2	11	6	13.0	90	920	3600	--	--
30...	120	519	--	--	--	--	--	--	--	--	--
FEB.											
02...	120	528	--	--	--	--	--	--	--	--	--
17...	--	480	1.8	16	4	11.0	76	400	32000	--	--
23...	47	226	--	--	--	--	--	--	--	--	--
MAR.											
06...	92	396	--	--	--	--	--	--	--	--	--
11...	--	380	1.4	26	6	13.4	97	500	3600	--	--
16...	60	297	--	--	--	--	--	--	--	--	--
APR.											
03...	96	368	--	--	--	--	--	--	--	--	--
08...	--	390	2.5	17	4	13.2	106	200	240	--	--
27...	88	413	--	--	--	--	--	--	--	--	--
MAY											
04...	86	416	--	--	--	--	--	--	--	--	--
05...	--	405	2.2	16	5	10.6	98	16	1700	--	--
08...	62	355	--	--	--	--	--	--	--	--	--
JUNE											
02...	--	--	--	--	--	--	--	--	--	--	.8
03...	--	405	2.4	16	10	7.0	74	130	5600	--	--
10...	64	343	--	--	--	--	--	--	--	--	--
25...	76	411	--	--	--	--	--	--	--	--	--
JULY											
06...	84	379	--	--	--	--	--	--	--	--	--
08...	--	395	3.2	15	22	6.2	71	180	3000	--	--
10...	90	379	--	--	--	--	--	--	--	--	--
AUG.											
03...	90	407	--	--	--	--	--	--	--	--	--
04...	--	420	2.8	15	10	6.1	69	120	7000	--	--
18...	110	438	--	--	--	--	--	--	--	--	--
SEP.											
02...	--	445	4.8	21	15	6.2	70	390	6700	--	--
14...	76	420	--	--	--	--	--	--	--	--	--
28...	86	452	--	--	--	--	--	--	--	--	--

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	513	472	537	480	---	---	438	429	556	540	417	327
2	515	474	482	475	---	---	441	422	552	538	---	---
3	530	485	527	478	---	---	444	438	562	546	---	---
4	543	512	528	450	---	---	450	398	562	559	393	384
5	542	514	471	450	---	---	398	298	622	516	406	385
6	516	488	478	462	---	---	298	273	516	320	411	394
7	508	494	480	458	---	---	---	---	321	276	400	316
8	512	494	515	465	---	---	---	---	336	279	327	261
9	518	495	495	465	---	---	---	---	386	334	360	311
10	535	510	477	463	---	---	---	---	---	---	385	360
11	528	506	464	452	---	---	---	---	471	453	390	383
12	512	467	452	442	---	---	495	480	480	471	395	389
13	483	415	456	448	---	---	501	494	501	480	393	363
14	430	388	450	440	---	---	500	480	501	489	365	333
15	495	430	453	411	---	---	480	464	494	480	335	317
16	546	482	412	292	---	---	480	464	489	471	329	312
17	545	515	322	279	---	---	480	476	496	489	354	327
18	545	510	417	322	---	---	504	480	493	476	369	315
19	522	507	422	412	---	---	508	489	476	278	380	368
20	531	518	422	412	---	---	513	508	278	176	380	374
21	531	527	414	393	464	435	512	506	176	158	380	368
22	527	510	393	380	442	435	512	507	211	166	399	356
23	540	501	425	382	436	429	520	508	228	156	360	351
24	545	515	444	411	438	423	525	514	218	151	394	348
25	542	516	---	---	442	430	536	522	374	212	363	357
26	537	516	---	---	454	442	537	513	375	350	366	360
27	527	508	---	---	454	447	528	514	364	327	374	363
28	546	525	---	---	452	444	537	528	327	268	372	359
29	558	537	---	---	450	438	537	526	---	---	363	336
30	565	548	---	---	444	434	542	532	---	---	362	324
31	560	520	---	---	446	430	546	537	---	---	368	351
MONTH	565	388	537	279	---	---	546	273	622	151	417	261

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	381	368	446	438	422	402	392	375	424	415	443	417
2	388	381	443	437	405	375	392	381	426	411	430	415
3	407	380	446	437	401	380	425	387	421	406	427	420
4	386	380	452	425	407	395	401	381	422	409	433	424
5	386	381	431	414	405	396	392	378	419	407	453	426
6	392	381	450	411	422	387	389	377	433	418	432	415
7	402	392	411	351	396	315	390	375	443	422	429	418
8	413	380	387	342	317	263	399	370	436	421	442	420
9	417	411	413	383	311	281	390	369	458	409	442	430
10	428	413	396	381	344	309	488	378	425	410	451	430
11	440	393	389	380	360	342	391	376	434	422	447	421
12	413	392	402	381	423	359	390	372	433	424	441	429
13	396	389	402	389	434	383	387	373	437	425	438	424
14	423	393	392	380	399	381	402	385	437	425	427	414
15	423	404	392	381	387	380	406	387	439	424	436	415
16	423	414	413	392	392	380	396	385	437	419	459	436
17	423	417	428	413	401	389	402	387	430	421	451	441
18	422	413	431	408	399	392	400	384	448	428	451	441
19	417	411	411	399	398	389	397	384	439	428	448	441
20	426	414	414	401	407	392	402	384	433	427	453	439
21	426	414	431	413	417	389	402	388	433	425	469	435
22	438	425	431	416	408	380	412	400	443	430	450	421
23	438	428	428	422	408	381	412	397	458	427	445	432
24	440	431	467	420	420	404	406	399	449	419	444	432
25	438	435	443	411	419	393	411	390	443	427	448	426
26	443	434	426	410	395	390	403	397	442	436	436	427
27	452	431	414	395	392	381	412	399	451	434	453	432
28	437	374	438	396	399	389	423	406	442	338	456	415
29	437	410	449	437	399	386	426	412	404	341	433	421
30	443	429	440	419	398	383	426	412	427	401	441	420
31	---	---	434	419	---	---	421	405	434	425	---	---
MONTH	452	368	467	342	434	263	488	369	458	338	469	414
YEAR	622	151										

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.8	7.7	7.6	7.5	---	---	6.6	6.4	6.9	6.7	7.5	6.7
2	7.8	7.7	7.5	7.5	---	---	6.6	6.3	6.9	6.8	---	---
3	7.8	7.7	7.6	7.5	---	---	6.6	6.4	6.9	6.8	---	---
4	7.8	7.7	7.6	7.1	---	---	6.6	6.2	6.9	6.8	6.9	6.8
5	7.8	7.7	7.2	7.1	---	---	6.7	6.6	6.9	6.8	6.9	6.6
6	7.8	7.7	7.2	7.1	---	---	6.7	6.5	6.9	6.7	6.9	6.9
7	7.8	7.7	7.2	7.1	---	---	---	---	6.8	6.5	6.9	6.9
8	7.7	7.7	7.2	7.1	---	---	---	---	6.8	6.5	6.9	6.8
9	7.7	7.7	7.2	7.1	---	---	---	---	6.8	6.5	6.9	6.8
10	7.7	7.7	7.2	7.1	---	---	---	---	---	---	7.2	7.2
11	7.7	7.7	7.2	7.1	---	---	---	---	6.9	6.8	7.2	7.2
12	7.7	7.7	7.2	7.1	---	---	6.9	6.9	6.8	6.8	7.2	7.2
13	7.7	7.6	7.2	7.1	---	---	6.9	6.8	6.9	6.8	7.2	7.2
14	7.7	7.6	7.2	7.1	---	---	6.9	6.8	6.9	6.8	7.2	7.1
15	7.7	7.6	7.2	7.1	---	---	6.9	6.8	6.9	6.8	7.2	7.2
16	7.7	7.6	7.2	7.1	---	---	6.9	6.7	6.9	6.8	7.2	7.2
17	7.6	7.5	7.4	7.1	---	---	6.9	6.6	6.9	6.7	7.2	6.8
18	7.5	7.5	7.2	7.1	---	---	6.9	6.7	6.9	6.7	7.2	7.2
19	7.5	7.5	7.1	7.1	---	---	6.9	6.6	6.8	6.7	7.2	7.2
20	7.5	7.4	7.2	7.1	---	---	6.9	6.6	6.8	6.7	7.2	7.2
21	7.7	7.5	7.4	7.1	6.6	6.5	6.8	6.5	6.8	6.8	7.2	7.2
22	7.7	7.6	7.2	7.1	6.6	6.6	6.8	6.4	6.9	6.8	7.2	7.2
23	7.6	7.5	7.2	7.1	6.6	6.5	6.8	6.4	6.9	6.8	7.2	7.2
24	7.6	7.5	7.2	7.1	6.7	6.6	6.9	6.8	6.9	6.8	7.3	7.2
25	7.6	7.5	---	---	6.6	6.4	6.9	6.8	7.0	6.8	7.2	7.2
26	7.6	7.4	---	---	6.4	6.2	6.9	6.8	6.9	6.8	7.2	6.7
27	7.6	7.5	---	---	6.4	6.2	6.9	6.8	7.0	6.9	7.2	7.2
28	7.6	7.5	---	---	6.5	6.3	6.9	6.8	7.3	6.9	7.3	7.2
29	7.6	7.5	---	---	6.5	6.3	6.9	6.7	---	---	7.3	7.2
30	7.6	7.5	---	---	6.5	6.4	6.9	6.7	---	---	7.3	7.2
31	7.5	7.5	---	---	6.6	6.5	6.9	6.8	---	---	7.3	7.2
MONTH	7.8	7.4	7.6	7.1	---	---	6.9	6.2	7.3	6.5	7.5	6.6

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.3	7.2	7.9	7.9	7.5	7.4	7.4	7.4	7.2	7.1	7.1	7.0
2	7.3	7.2	7.9	7.9	7.5	7.4	7.4	7.4	7.1	7.1	7.1	7.0
3	7.3	7.3	7.9	7.9	7.4	7.4	7.5	7.4	7.3	7.1	7.1	7.0
4	7.3	7.2	7.9	7.5	7.4	7.4	7.4	7.4	7.3	7.1	7.1	7.0
5	7.3	7.2	7.7	7.7	7.4	7.4	7.4	7.4	7.2	7.1	7.1	7.0
6	7.3	7.2	7.7	7.7	7.5	7.4	7.4	7.4	7.2	7.1	7.1	7.1
7	7.3	7.2	7.7	7.7	7.4	7.4	7.4	7.4	7.4	7.1	7.1	7.0
8	7.5	7.3	7.7	7.7	7.4	7.4	7.4	7.1	7.2	7.1	7.1	7.0
9	7.6	7.5	7.7	7.7	7.4	7.4	7.1	7.1	7.2	7.0	7.1	7.0
10	7.6	7.6	7.7	7.5	7.4	7.4	7.1	7.1	7.2	7.1	7.1	7.0
11	7.7	7.7	7.5	7.4	7.4	7.4	7.2	7.1	7.3	7.1	7.1	7.1
12	7.8	7.8	7.5	7.5	7.4	7.4	7.2	7.1	7.2	7.1	7.1	7.1
13	8.0	7.8	7.5	7.5	7.4	7.4	7.2	7.1	7.2	7.1	7.1	7.1
14	8.0	7.9	7.5	7.4	7.4	7.4	7.2	7.1	7.2	7.1	7.2	7.1
15	8.0	7.9	7.5	7.4	7.4	7.4	7.2	7.1	7.1	7.1	7.2	7.1
16	7.9	7.9	7.5	7.4	7.4	7.4	7.2	7.1	7.1	7.1	7.1	7.1
17	8.0	7.9	7.5	7.4	7.5	7.4	7.2	7.1	7.2	7.0	7.1	7.1
18	7.9	7.9	7.5	7.4	7.4	7.4	7.2	7.1	7.2	7.1	7.1	7.1
19	7.9	7.9	7.5	7.4	7.4	7.4	7.2	7.1	7.1	7.1	7.1	7.1
20	7.9	7.9	7.5	7.4	7.4	7.4	7.2	7.1	7.2	7.1	7.1	7.1
21	7.9	7.9	7.5	7.4	7.5	7.4	7.3	7.1	7.2	7.1	7.2	7.1
22	7.9	7.9	7.5	7.5	7.4	7.4	7.1	7.1	7.2	7.1	7.2	7.1
23	7.9	7.9	7.5	7.4	7.5	7.4	7.2	7.1	7.2	7.1	7.1	7.1
24	7.9	7.9	7.5	7.4	7.4	7.4	7.1	7.1	7.2	7.1	7.2	7.1
25	7.9	7.9	7.5	7.5	7.4	7.4	7.2	7.1	7.1	7.1	7.2	7.1
26	7.9	7.9	7.5	7.5	7.5	7.4	7.1	7.1	7.1	7.1	7.1	7.1
27	7.9	7.8	7.5	7.5	7.4	7.4	7.2	7.1	7.1	7.1	7.1	7.1
28	7.9	7.9	7.5	7.5	7.5	7.4	7.1	7.1	7.2	7.1	7.1	7.1
29	7.9	7.9	7.5	7.4	7.5	7.4	7.1	7.1	7.1	7.1	7.1	7.1
30	7.9	7.9	7.5	7.4	7.4	7.4	7.2	7.1	7.1	7.1	7.2	7.1
31	---	---	7.5	7.4	---	---	7.2	7.1	7.1	6.9	---	---
MONTH	8.0	7.2	7.9	7.4	7.5	7.4	7.5	7.1	7.4	6.9	7.2	7.0
YEAR	8.0	6.2										

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.1	8.1	8.5	8.4	---	---	14.1	13.8	10.5	10.3	11.9	8.1
2	8.1	8.1	8.5	8.4	---	---	14.0	13.6	10.9	10.5	---	---
3	8.2	8.1	8.5	8.4	---	---	14.0	13.6	11.2	10.9	---	---
4	8.2	8.1	9.0	8.4	---	---	13.8	12.5	11.1	10.5	12.5	11.3
5	8.2	8.1	9.2	9.0	---	---	12.5	12.3	10.6	9.9	12.3	11.3
6	8.2	8.1	9.3	9.2	---	---	12.9	12.5	10.9	10.0	12.0	11.8
7	8.3	8.2	9.5	9.3	---	---	---	---	10.4	10.0	11.8	11.6
8	8.2	8.2	9.8	9.5	---	---	---	---	10.0	9.4	11.7	11.5
9	8.2	8.2	9.9	9.7	---	---	---	---	9.4	8.8	12.3	11.7
10	8.3	8.2	10.1	9.9	---	---	---	---	---	---	12.8	12.3
11	8.2	8.2	10.3	10.1	---	---	---	---	10.1	8.6	12.7	12.4
12	8.3	8.1	10.4	10.2	---	---	12.6	12.4	9.9	9.8	12.5	12.2
13	8.3	8.2	10.6	10.4	---	---	13.0	12.2	9.8	9.4	12.2	12.1
14	8.3	8.3	10.8	10.6	---	---	12.6	12.3	9.8	9.4	12.3	11.9
15	8.3	8.2	11.0	10.8	---	---	12.6	12.0	10.0	9.8	11.9	11.4
16	8.3	8.2	11.1	10.5	---	---	12.6	12.4	10.7	9.8	12.0	11.3
17	8.3	8.2	11.3	11.1	---	---	12.7	12.3	10.7	10.5	12.3	12.0
18	8.3	8.2	11.5	11.3	---	---	12.9	12.4	10.8	10.6	12.5	12.1
19	8.3	8.3	11.7	11.5	---	---	12.6	12.3	11.4	10.8	12.4	12.0
20	8.3	8.3	11.9	11.7	---	---	12.5	12.2	12.3	11.0	12.2	12.0
21	8.4	8.3	12.1	11.9	14.1	13.8	12.4	12.2	12.1	9.9	12.8	12.2
22	8.3	8.3	12.2	12.0	14.0	13.3	12.3	11.5	11.9	9.5	12.7	12.3
23	8.4	8.3	12.5	12.2	13.5	13.1	11.5	11.4	11.7	9.8	12.8	12.5
24	8.4	8.3	12.7	12.5	13.7	13.0	11.7	11.4	11.5	9.7	12.9	12.6
25	8.4	8.3	---	---	14.1	13.6	11.5	11.4	12.2	10.4	13.1	12.5
26	8.4	8.3	---	---	14.2	13.7	11.6	11.5	12.2	10.4	13.2	12.6
27	8.4	8.3	---	---	14.3	13.9	11.5	11.4	12.3	10.0	13.2	12.7
28	8.4	8.3	---	---	14.4	14.0	11.4	11.0	11.9	9.3	12.9	12.4
29	8.4	8.3	---	---	14.6	14.1	11.1	10.9	---	---	12.6	12.3
30	8.4	8.3	---	---	14.5	14.1	11.0	10.8	---	---	13.5	12.4
31	8.5	8.3	---	---	14.4	14.1	10.9	10.3	---	---	14.1	12.8
MONTH	8.5	8.1	12.7	8.4	---	---	14.1	10.3	12.3	8.6	14.1	8.1

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	12.7	12.8	11.0	7.8	7.4	5.5	4.9	6.8	6.0	6.9	6.0
2	13.1	12.0	12.5	11.6	7.7	7.3	6.0	5.4	6.7	6.1	6.8	5.9
3	13.4	12.3	11.6	10.7	7.7	7.1	6.0	5.1	7.0	6.3	6.5	6.3
4	13.9	12.7	10.7	10.1	7.8	7.0	5.9	5.2	6.6	5.9	7.0	5.8
5	14.1	13.6	10.8	9.8	7.4	6.5	5.9	5.2	7.1	6.1	6.2	5.7
6	14.0	13.4	10.1	8.6	7.0	6.1	6.4	5.0	7.1	6.1	6.9	5.7
7	14.2	13.4	8.8	8.1	6.1	5.0	6.6	5.7	7.0	6.1	6.4	5.4
8	13.6	11.2	9.2	8.4	5.1	4.5	7.3	5.9	7.0	6.1	5.9	5.1
9	13.0	12.1	9.1	8.4	5.3	4.7	6.8	5.9	7.2	6.0	5.7	4.7
10	13.2	11.8	9.5	8.6	5.1	4.7	6.4	5.6	7.2	5.8	5.6	4.7
11	13.3	12.5	9.7	9.2	5.2	4.8	6.2	5.7	6.4	5.5	5.3	4.6
12	13.0	12.2	9.5	8.5	5.1	4.2	6.0	5.5	6.3	5.3	5.0	4.6
13	12.5	11.1	9.0	8.0	5.6	4.2	6.2	5.5	7.4	5.9	4.8	4.5
14	11.0	9.8	9.9	8.6	5.8	5.4	6.0	5.5	7.3	6.0	4.9	4.6
15	11.0	10.0	10.5	9.4	6.5	5.4	6.1	5.6	6.9	6.1	5.0	4.7
16	11.3	10.5	10.2	9.4	6.5	6.1	6.5	5.7	7.1	5.9	4.9	4.7
17	11.2	9.6	9.4	8.2	6.8	6.2	6.9	5.6	6.7	5.8	4.9	4.6
18	11.0	9.0	8.9	7.6	6.7	6.2	7.3	6.3	6.6	5.7	5.3	4.9
19	11.1	10.5	9.1	7.9	6.7	6.4	6.8	6.3	6.7	5.9	5.3	4.9
20	10.9	10.2	8.1	6.9	7.0	6.4	7.1	6.2	6.8	5.8	5.0	4.7
21	10.2	9.3	7.7	6.3	6.7	6.3	7.4	5.9	6.3	5.6	5.2	4.6
22	9.3	8.6	7.8	6.2	6.3	5.4	7.5	6.5	6.5	5.2	5.1	4.6
23	9.3	8.3	7.9	6.6	5.7	5.3	7.8	6.7	6.1	5.0	5.1	4.9
24	9.1	8.3	7.7	6.5	5.5	5.0	7.2	6.1	5.9	5.3	5.2	4.9
25	11.2	9.1	7.5	6.9	5.8	4.9	6.7	5.8	6.3	5.5	5.4	5.1
26	11.1	10.6	6.9	6.5	6.0	5.5	6.6	5.8	6.1	5.5	5.5	5.3
27	10.6	8.8	6.9	6.3	5.9	5.6	6.4	5.8	6.4	5.6	5.5	5.2
28	11.4	8.9	7.5	6.8	5.7	5.3	6.5	5.6	6.4	5.7	5.3	5.0
29	10.9	10.6	8.2	7.3	6.0	5.4	6.1	5.4	6.5	5.9	5.4	5.0
30	11.3	10.8	8.3	7.8	5.9	5.4	5.7	5.4	6.7	5.9	5.7	5.3
31	---	---	8.1	7.5	---	---	6.7	5.4	6.6	5.6	---	---
MONTH	14.2	8.3	12.8	6.2	7.8	4.2	7.8	4.9	7.4	5.0	7.0	4.5
YEAR	14.6	4.2										

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	16.5	12.5	12.0	---	---	0.0	0.0	1.5	1.0	4.5	2.0
2	17.5	16.5	12.5	12.0	---	---	0.5	0.0	1.5	0.5	---	---
3	17.0	16.0	12.5	12.0	---	---	0.5	0.0	1.0	0.5	---	---
4	16.5	15.5	12.0	10.0	---	---	1.0	0.0	1.0	0.5	3.0	2.0
5	16.0	15.5	10.5	9.0	---	---	1.5	0.0	1.0	0.5	3.0	2.5
6	16.5	15.0	9.5	9.0	---	---	0.0	0.0	1.0	0.5	3.0	2.5
7	17.0	15.5	9.5	9.0	---	---	---	---	1.0	0.5	2.5	2.0
8	17.5	16.5	9.5	9.0	---	---	---	---	1.0	1.0	2.0	1.0
9	18.0	17.5	9.5	9.0	---	---	---	---	1.5	1.0	1.5	1.0
10	18.0	17.5	10.0	9.0	---	---	---	---	---	---	1.5	1.0
11	17.5	17.0	10.5	10.0	---	---	---	---	0.5	0.5	2.5	1.5
12	17.0	16.5	11.0	10.5	---	---	1.5	0.0	1.0	0.5	2.0	1.5
13	18.0	17.0	11.0	10.5	---	---	1.0	0.0	1.5	1.0	2.0	1.5
14	17.5	17.0	10.5	9.0	---	---	1.0	0.0	2.0	1.0	3.0	1.0
15	17.0	15.5	9.0	7.5	---	---	1.5	1.0	1.5	1.0	6.0	3.0
16	15.5	13.0	7.5	5.0	---	---	1.5	0.5	1.5	0.0	6.5	4.0
17	13.0	12.0	5.0	3.5	---	---	0.5	0.0	1.0	0.0	4.0	3.0
18	12.5	12.0	5.5	4.0	---	---	0.5	0.0	0.0	0.0	3.0	2.0
19	12.5	12.0	6.5	5.5	---	---	1.0	0.0	0.0	0.0	3.0	1.5
20	13.0	12.0	7.0	5.5	---	---	0.5	0.0	2.0	0.0	3.0	2.5
21	13.5	13.0	6.5	6.0	2.5	2.0	0.5	0.0	1.0	0.5	3.0	2.0
22	14.0	13.5	6.0	5.5	3.0	2.0	0.5	0.0	1.0	0.5	4.0	0.5
23	14.0	13.5	5.5	3.5	3.0	2.5	0.5	0.0	1.0	1.0	3.0	2.0
24	14.0	13.0	3.5	1.5	3.0	1.5	1.0	0.5	1.0	0.5	2.5	1.5
25	13.5	13.0	---	---	1.5	1.0	2.0	0.5	2.0	1.0	2.5	1.5
26	13.5	13.0	---	---	1.0	0.0	2.0	1.5	3.0	1.0	2.5	1.5
27	13.5	13.0	---	---	0.0	0.0	2.0	1.0	4.0	2.0	3.5	1.5
28	13.5	12.5	---	---	0.0	0.0	1.5	0.5	4.5	2.5	5.5	1.0
29	12.5	12.0	---	---	0.0	0.0	1.0	0.5	---	---	6.0	5.0
30	12.5	12.0	---	---	0.0	0.0	1.0	0.5	---	---	7.5	4.0
31	12.5	12.0	---	---	0.0	0.0	1.5	1.0	---	---	7.0	3.5
MONTH	18.0	12.0	12.5	1.5	---	---	2.0	0.0	4.5	0.0	7.5	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	4.5	11.5	10.5	19.0	17.5	24.5	22.5	22.5	21.0	23.0	21.5
2	7.5	6.0	11.5	10.5	19.5	18.5	24.0	22.0	23.0	21.5	23.0	22.0
3	7.5	6.5	12.0	10.5	21.0	19.0	24.0	22.5	23.0	22.5	23.5	22.0
4	6.5	5.5	12.0	10.5	21.5	18.5	24.0	21.5	23.0	22.0	24.5	22.5
5	5.5	4.5	14.0	11.5	21.5	19.0	23.5	21.5	22.5	21.0	24.5	23.5
6	5.5	4.0	14.5	13.0	22.0	20.5	24.5	22.5	22.0	20.0	25.0	23.0
7	6.5	4.0	15.0	13.5	21.5	20.5	25.0	22.5	22.0	20.5	25.5	23.5
8	8.5	6.0	15.5	14.0	21.5	21.0	25.0	23.0	22.5	20.5	25.0	23.0
9	10.5	7.5	16.0	14.5	21.0	19.5	24.5	23.0	23.0	21.0	25.0	23.0
10	11.0	9.0	17.0	15.0	20.5	19.0	25.0	22.5	23.5	22.5	25.0	22.5
11	11.5	8.5	17.5	16.0	20.5	18.5	24.5	22.5	24.5	23.0	24.0	22.0
12	11.5	9.0	17.5	16.5	21.0	20.0	23.5	21.5	24.5	22.5	23.5	22.5
13	11.5	10.0	17.0	15.0	21.5	20.0	23.5	22.0	24.0	21.5	22.5	21.5
14	11.5	10.5	16.0	13.5	21.0	19.5	24.0	22.0	23.0	21.5	21.5	20.0
15	11.0	9.5	16.5	14.5	21.0	19.5	24.0	22.0	23.5	22.5	20.5	19.0
16	10.5	8.5	17.5	16.0	20.5	19.0	24.0	22.5	23.5	22.5	20.5	20.0
17	10.5	9.5	19.0	16.5	20.5	19.0	24.5	23.0	24.0	21.5	20.5	19.5
18	11.0	8.5	20.5	17.0	20.5	18.0	24.5	22.5	22.5	21.0	20.5	19.0
19	11.5	9.5	21.5	19.0	21.0	19.0	24.0	22.5	22.5	21.0	20.5	19.5
20	13.0	10.5	21.5	20.0	22.5	20.0	23.5	22.0	23.5	22.5	20.5	20.0
21	13.5	13.0	22.0	20.5	22.5	21.0	23.5	21.5	24.0	22.5	20.5	18.5
22	13.0	11.5	21.0	19.0	22.5	20.5	23.5	21.5	24.5	23.0	19.0	17.5
23	11.5	10.0	20.0	17.5	22.5	20.5	24.0	22.5	24.5	23.5	18.5	17.5
24	12.0	10.5	19.0	17.0	22.5	21.0	24.0	23.5	24.0	22.0	18.5	17.0
25	10.5	9.5	18.0	17.5	22.5	20.5	24.0	22.5	23.0	21.5	18.0	16.0
26	10.0	10.0	17.5	16.5	22.0	20.5	24.0	23.0	22.0	21.5	17.5	16.0
27	10.0	9.0	16.5	15.0	22.0	20.0	24.5	23.0	22.5	21.5	17.5	16.0
28	10.5	9.5	15.5	14.0	22.5	21.0	24.5	22.5	23.0	20.5	18.5	17.0
29	11.0	10.0	16.0	14.5	23.5	22.0	23.5	22.5	21.5	20.0	20.0	18.0
30	11.5	10.0	17.0	15.0	24.5	22.5	23.5	22.0	22.0	20.5	20.5	19.0
31	---	---	18.5	16.5	---	---	22.5	21.5	23.0	21.5	---	---
MONTH	13.5	4.0	22.0	10.5	24.5	17.5	25.0	21.5	24.5	20.0	25.5	16.0
YEAR	25.5	0.0										

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO

LOCATION.--Lat 41°01'53", long 80°31'10", Mahoning County, on left bank 800 ft upstream from Ohio-Pennsylvania State line, just below Lowellville, 0.9 mile downstream from gaging station at Lowellville, and 4 miles downstream from Yellow Creek.

DRAINAGE AREA.--1,075 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1967 to September 1971.
Water temperatures: January 1967 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,480 micromhos Feb. 5; minimum, 225 micromhos Feb. 22.
pH: Maximum, 8.1 Oct. 14, 17, 22, Nov. 16; minimum, 6.4 Oct. 9.
Dissolved oxygen: Maximum, 13.1 mg/l Mar. 5; minimum, 0.4 mg/l June 1, 2.
Water temperatures: Maximum, 39.0°C June 29; minimum, 2.0°C Feb. 21.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
08...	1015	370	--	--	52	19	--	--	88	--	--	--
10...	1150	375	1200	230	--	--	62	0	51	140	64	2.5
15...	0915	1110	1600	340	--	--	72	0	59	130	42	1.3
NOV.												
04...	0900	1100	--	--	58	16	--	--	86	--	--	--
11...	1500	736	1500	320	--	--	84	0	69	140	56	1.1
18...	1400	1500	2300	340	--	--	63	0	52	100	32	.8
DEC.												
02...	1700	1350	2300	230	--	--	65	0	53	110	34	.5
03...	0900	1290	--	--	44	13	--	--	62	--	--	--
30...	1500	1390	1100	290	--	--	88	0	72	110	39	.8
JAN.												
07...	0935	1290	2000	--	--	--	69	0	57	95	39	.5
13...	1000	685	--	--	59	18	--	--	67	--	--	--
23...	1220	450	1400	--	--	--	75	0	62	170	100	2.3
FEB.												
03...	1400	370	1600	--	--	--	65	0	53	170	110	3.3
17...	0830	692	--	--	60	17	--	--	62	--	--	--
24...	1700	4670	1900	--	--	--	59	0	48	72	35	.5
MAR.												
04...	1700	2960	1000	180	--	--	64	0	52	77	31	.9
11...	1100	2300	--	--	36	18	--	--	61	--	--	--
11...	1300	--	--	--	--	--	--	--	--	--	--	--
24...	1700	1480	1400	240	--	--	58	0	48	99	59	.9
APR.												
03...	1200	752	3000	760	--	--	62	0	51	120	56	.9
08...	1330	468	--	--	62	14	--	--	74	--	--	--
28...	1500	365	1400	570	--	--	56	0	46	150	79	1.2
MAY												
01...	1300	350	880	590	--	--	42	0	34	160	80	2.2
05...	0830	315	--	--	63	17	--	--	97	--	--	--
12...	1700	872	1500	340	--	--	64	0	52	110	52	.7
JUNE												
03...	0830	800	--	--	50	14	--	--	97	--	--	--
05...	1400	325	970	720	--	--	42	0	34	160	77	1.1
09...	1700	685	1100	480	--	--	60	0	49	110	51	.8
JULY												
06...	0900	498	--	--	47	13	--	--	77	--	--	--
08...	1700	480	--	--	--	--	58	0	48	100	78	1.0
24...	1300	545	970	340	--	--	70	0	57	110	55	.7
AUG.												
01...	1400	486	950	370	--	--	70	0	57	110	55	.7
04...	0900	552	--	--	45	13	--	--	74	--	--	--
04...	1400	517	500	170	--	--	70	0	57	100	50	.5
SEP.												
02...	0915	498	--	--	49	14	--	--	84	--	--	--
15...	1800	692	670	250	--	--	90	0	74	110	48	.6
25...	1100	380	750	240	--	--	78	0	64	120	62	.7

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1968-71): Maximum, 1,480 micromhos Feb. 5, 1971; minimum, 225 micromhos Feb. 22, 1971.
pH (1968-71): Maximum, 9.9 Jan. 26, 1969; minimum, 5.3 Mar. 11, 1969, Jan. 13, 14, 1970.
Dissolved oxygen (1968-69, 1970-71): Maximum, 13.1 mg/l Mar. 5, 1971; minimum, 0.4 mg/l Apr. 8, 1969, June 1, 2, 1971.
Water temperatures: Maximum, 39.0°C June 29, 1971; minimum, 2.0°C Feb. 21, 1971.

REMARKS.--Continuous water-quality recorder operated since January 1967. Minimum recorded pH of 3.0 occurred Jan. 24, 1967. Maximum recorded dissolved oxygen concentration of 14.2 mg/l occurred Mar. 25, 1970. Minimum recorded dissolved oxygen concentration of 0.2 mg/l occurred Feb. 3, 1967, Dec. 15-19, 1969, Jan. 13-17, 1970. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. An additional sample was collected each month as part of the Environmental Protection Agency national network. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for 03099500 Mahoning River at Lowellville, Ohio (drainage area 1,073 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	ORGANIC NITROGEN (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	NITRATE (N) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)
OCT.												
08...	--	--	--	--	--	--	450	46	496	--	--	17
10...	--	--	--	34	--	--	418	--	--	200	150	--
15...	--	--	--	20	--	--	336	--	--	180	120	--
NOV.												
04...	--	--	--	--	--	--	346	66	412	--	--	9
11...	--	--	--	21	--	--	408	--	--	220	150	--
18...	--	--	--	14	--	--	298	--	--	150	98	--
DEC.												
02...	--	--	--	11	--	--	252	--	--	180	130	--
03...	.00	.21	.9	--	.32	.69	260	88	348	--	--	11
30...	--	--	--	15	--	--	328	--	--	200	130	--
JAN.												
07...	--	--	--	10	--	--	284	--	--	140	100	--
13...	--	--	--	--	--	--	400	56	456	--	--	11
23...	--	--	--	34	--	--	508	--	--	240	180	--
FEB.												
03...	--	--	--	31	--	--	546	--	--	250	200	--
17...	--	--	--	--	--	--	476	32	508	--	--	15
24...	--	--	--	7.2	--	--	206	--	--	130	82	--
MAR.												
04...	--	--	--	11	--	--	254	--	--	150	98	--
11...	--	--	--	--	--	--	292	92	384	--	--	5
11...	.64	.04	1.3	--	.12	.40	--	--	--	--	--	--
24...	--	--	--	14	--	--	348	--	--	180	130	--
APR.												
03...	--	--	--	18	--	--	398	--	--	180	130	--
08...	--	--	--	--	--	--	410	64	474	--	--	17
28...	--	--	--	34	--	--	498	--	--	220	170	--
MAY												
01...	--	--	--	39	--	--	486	--	--	220	180	--
05...	--	--	--	--	--	--	478	32	510	--	--	15
12...	--	--	--	11	--	--	336	--	--	170	120	--
JUNE												
03...	.93	4.2	.5	--	.080	1.5	374	76	450	--	--	12
05...	--	--	--	29	--	--	454	--	--	220	180	--
09...	--	--	--	20	--	--	346	--	--	190	140	--
JULY												
08...	--	--	--	--	--	--	360	12	372	--	--	0
08...	--	--	--	19	--	--	362	--	--	180	130	--
24...	--	--	--	17	--	--	318	--	--	170	110	--
AUG.												
01...	--	--	--	18	--	--	326	--	--	180	120	--
04...	--	--	--	--	--	--	324	28	352	--	--	15
04...	--	--	--	19	--	--	310	--	--	160	100	--
SEP.												
02...	.26	.13	.1	--	.92	1.3	370	46	416	--	--	0
15...	--	--	--	11	--	--	324	--	--	180	110	--
25...	--	--	--	30	--	--	382	--	--	190	130	--

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	IMMEDIATE COLIFORM (COL. PER 100 ML)	PHENOLS (UG/L)	CYANIDE (CN) (MG/L)
OCT.											
08...	1015	730	--	6	3.4	4.8	15	4100	45000	8	.04
10...	1150	714	--	--	--	--	--	--	--	--	--
15...	0915	552	--	--	--	--	--	--	--	--	--
NOV.											
04...	0900	595	15	20	6.5	12	34	17000	96000	10	.05
11...	1500	653	--	--	--	--	--	--	--	--	--
18...	1400	446	--	--	--	--	--	--	--	--	--
DEC.											
02...	1700	470	--	--	--	--	--	--	--	--	--
03...	0900	460	20	20	8.9	7.8	120	14000	94000	17	.02
30...	1500	548	--	--	--	--	--	--	--	--	--
JAN.											
07...	0935	477	--	--	--	--	--	--	--	--	--
13...	1000	670	15	30	8.4	13	42	26000	72000	140	.04
23...	1220	869	--	--	--	--	--	--	--	--	--
FEB.											
03...	1400	930	--	--	--	--	--	--	--	--	--
17...	0830	780	15	25	7.9	11	36	3500	43000	220	.46
24...	1700	384	--	--	--	--	--	--	--	--	--
MAR.											
04...	1700	421	--	--	--	--	--	--	--	--	--
11...	1100	490	7	15	10.9	5.6	37	13000	65000	160	.30
24...	1700	577	--	--	--	--	--	--	--	--	--
APR.											
03...	1200	605	--	--	--	--	--	--	--	--	--
08...	1330	700	5	20	4.2	6.6	30	2500	20000	7	.42
28...	1500	780	--	--	--	--	--	--	--	--	--
MAY											
01...	1300	825	--	--	--	--	--	--	--	--	--
05...	0830	760	6	6	2.6	8.8	40	580	15000	12	.58
12...	1700	562	--	--	--	--	--	--	--	--	--
JUNE											
03...	0830	580	10	50	.8	17	150	17000	54000	11	.18
05...	1400	776	--	--	--	--	--	--	--	--	--
09...	1700	551	--	--	--	--	--	--	--	--	--
JULY											
08...	0900	590	7	1	2.8	6.6	24	2200	16000	17	.06
08...	1700	596	--	--	--	--	--	--	--	--	--
24...	1300	531	--	--	--	--	--	--	--	--	--
AUG.											
01...	1400	576	--	--	--	--	--	--	--	--	--
04...	0900	530	7	10	2.6	7.2	30	6000	160000	10	.03
04...	1400	516	--	--	--	--	--	--	--	--	--
SEP.											
02...	0915	610	20	5	2.5	7.7	39	10000	13000	4	.01
15...	1800	545	--	--	--	--	--	--	--	--	--
25...	1100	646	--	--	--	--	--	--	--	--	--

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.								
08...	7.0	0	2	4	1	1	1.2	120
JUNE								
03...	19	0	--	--	--	--	1.0	--

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	607	576	518	488	584	564	863	813	521	360
2	---	---	577	543	504	470	596	576	837	810	551	461
3	---	---	588	559	503	470	603	570	843	795	543	378
4	---	---	595	567	510	470	647	576	969	801	522	434
5	---	---	581	544	501	482	579	540	1480	842	572	357
6	---	---	603	580	483	446	540	485	891	669	569	416
7	---	---	614	588	552	455	536	485	669	506	609	475
8	---	---	636	613	548	501	566	518	513	488	531	414
9	720	686	676	632	549	513	582	555	585	503	549	316
10	725	699	678	594	563	531	---	---	626	569	575	312
11	702	576	684	606	606	540	---	---	693	620	636	465
12	660	561	681	635	575	495	---	---	1010	693	552	486
13	654	435	674	638	513	462	678	659	1050	779	576	486
14	614	543	662	612	462	410	902	654	839	776	486	440
15	603	549	615	509	462	408	689	648	815	737	447	427
16	615	575	528	495	530	460	677	633	794	747	437	406
17	653	600	504	447	554	512	690	660	917	756	448	412
18	666	643	455	425	527	512	735	681	903	777	494	432
19	677	659	---	---	522	500	756	717	777	530	568	479
20	704	666	---	---	516	494	786	749	531	332	567	480
21	742	660	---	---	545	497	813	768	345	248	730	487
22	684	631	---	---	570	539	882	807	387	225	541	493
23	692	654	---	---	567	540	969	855	393	328	554	483
24	705	650	---	---	549	527	882	836	387	316	709	523
25	705	669	[illegible]	501	537	518	936	833	399	297	605	536
26	703	670	540	504	572	525	864	813	542	332	557	488
27	685	659	528	505	594	540	849	790	531	483	546	319
28	700	673	557	509	588	551	881	843	494	396	489	328
29	727	682	533	449	600	555	897	831	---	---	506	451
30	726	553	512	471	593	558	999	861	---	---	486	429
31	630	528	---	---	593	567	975	839	---	---	579	414
MONTH	---	---	684	425	606	408	999	485	1480	225	730	312

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	654	525	872	789	747	656	606	459	599	558	698	577
2	641	568	842	765	755	696	560	410	560	540	654	538
3	676	503	783	759	765	531	576	383	555	522	645	615
4	653	623	828	761	780	695	563	429	546	519	639	608
5	683	635	837	746	809	750	549	419	579	534	638	615
6	770	664	753	486	785	608	537	398	579	555	635	609
7	802	752	630	570	668	590	506	365	576	543	611	573
8	805	719	575	510	609	536	641	342	573	540	615	582
9	756	702	537	507	582	558	630	578	578	537	626	588
10	737	681	584	503	681	567	612	569	561	542	648	623
11	798	707	633	564	677	620	591	399	608	539	641	623
12	788	713	653	521	738	668	579	530	576	540	648	618
13	800	704	633	576	719	693	587	540	570	545	638	501
14	771	672	618	551	761	687	651	586	576	554	554	503
15	791	741	660	572	756	678	662	621	580	554	569	518
16	764	717	663	642	732	680	660	630	565	540	615	557
17	773	722	675	636	752	722	653	600	566	536	621	593
18	765	737	720	665	724	678	645	599	566	532	636	615
19	761	725	719	696	699	668	630	524	587	556	674	608
20	768	728	776	704	681	641	578	519	596	524	678	602
21	753	699	783	741	650	428	605	555	555	516	663	629
22	773	689	797	764	620	554	615	567	544	439	657	618
23	803	762	801	762	650	595	597	567	572	413	657	590
24	797	759	786	756	686	644	585	528	608	482	662	635
25	798	753	774	672	698	566	602	534	626	530	669	641
26	798	758	704	659	672	429	581	551	632	536	666	617
27	803	774	746	668	617	357	587	530	625	463	701	612
28	837	771	780	729	657	576	609	566	696	431	674	599
29	846	809	770	728	608	503	606	569	697	652	666	644
30	837	803	771	729	626	420	594	537	697	622	680	596
31	---	---	768	713	---	---	630	560	690	620	---	---
MONTH	846	503	872	486	809	357	662	342	697	413	701	501
YEAR	1480	225										

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	7.9	7.8	7.4	6.8	7.5	7.4	7.5	7.3	7.6	7.2
2	---	---	7.8	7.5	7.2	6.8	7.5	7.4	7.3	7.0	7.5	7.3
3	---	---	7.7	7.2	7.6	7.0	7.5	7.4	7.2	7.0	7.4	7.2
4	---	---	7.7	7.4	7.4	7.2	7.9	7.2	7.3	7.0	7.8	7.3
5	---	---	7.8	7.5	7.4	7.2	7.5	7.0	7.6	7.1	7.5	7.2
6	---	---	7.8	7.3	7.7	7.4	7.3	7.0	7.7	7.0	7.5	7.3
7	---	---	7.8	7.6	7.7	7.0	7.9	7.0	7.5	7.0	7.6	7.3
8	---	---	7.9	7.7	7.4	7.0	7.3	6.9	7.3	6.9	7.4	7.3
9	7.4	6.4	7.8	7.5	7.3	7.1	7.4	6.9	7.1	6.8	7.4	7.3
10	7.6	7.4	7.6	7.4	7.3	6.9	---	---	7.2	6.9	7.3	7.3
11	7.6	7.3	7.6	7.4	7.2	7.0	---	---	7.1	6.6	7.4	7.2
12	7.7	7.5	7.9	7.3	7.6	6.7	---	---	7.0	6.7	7.3	7.0
13	7.8	7.3	7.6	7.2	7.3	7.2	7.7	6.9	7.2	7.0	7.4	7.2
14	8.1	7.5	7.8	7.4	7.5	7.0	7.7	7.0	7.2	6.9	7.4	7.0
15	7.7	7.5	7.9	7.7	7.3	6.9	7.4	7.2	7.3	7.0	7.7	7.3
16	7.6	7.5	8.1	7.9	7.4	7.1	7.6	7.1	7.1	6.9	7.7	7.3
17	8.1	7.4	8.0	7.8	7.5	7.1	7.5	7.3	7.2	7.0	7.5	7.3
18	7.8	7.6	7.8	7.6	7.4	7.2	7.6	7.0	7.4	7.0	7.6	7.2
19	7.8	7.5	---	---	7.6	7.3	7.6	7.1	7.3	7.1	7.6	7.0
20	7.7	7.5	---	---	7.5	7.4	7.6	7.2	7.6	7.3	7.6	7.3
21	7.6	7.4	---	---	7.6	7.2	7.6	7.1	7.8	7.5	7.6	7.3
22	8.1	7.3	---	---	7.5	7.3	7.2	7.1	7.7	7.4	7.6	7.3
23	7.6	7.3	---	---	7.5	7.2	7.4	6.7	---	---	7.5	7.3
24	7.7	7.4	---	---	7.9	7.4	7.5	7.2	---	---	7.5	7.3
25	7.8	7.7	7.4	7.2	7.7	7.6	7.3	6.9	---	---	7.5	7.0
26	7.7	7.5	7.5	7.3	7.8	7.5	7.3	7.1	7.7	7.0	7.3	6.8
27	7.7	7.5	7.4	7.2	7.7	7.6	7.4	7.2	7.6	7.3	7.4	6.8
28	7.8	7.3	7.5	7.2	7.9	7.5	7.4	7.0	7.5	7.3	7.5	7.2
29	7.9	7.5	7.4	7.3	7.6	7.4	7.3	6.9	---	---	7.5	7.2
30	7.7	7.5	7.5	7.2	7.5	7.4	7.3	6.8	---	---	7.3	7.1
31	7.8	7.3	---	---	7.8	7.0	7.4	7.2	---	---	7.3	7.1
MONTH	---	---	8.1	7.2	7.9	6.7	7.9	6.7	7.8	6.6	7.8	6.8

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.7	7.1	7.3	7.2	7.3	7.0	7.5	7.4	7.2	7.0	6.9	6.8
2	7.4	7.1	7.4	7.2	7.3	7.1	7.5	7.2	7.1	7.0	6.9	6.9
3	7.4	6.9	7.5	7.2	7.4	7.1	7.5	7.2	7.1	7.0	6.9	6.6
4	7.5	7.2	7.4	7.2	7.4	7.0	7.5	7.4	7.2	7.0	6.9	6.7
5	7.5	7.2	7.4	7.1	7.3	7.1	7.4	7.3	7.1	6.9	6.9	6.8
6	7.4	7.0	7.9	7.3	7.3	7.2	7.4	7.3	7.1	6.9	6.9	6.8
7	7.3	7.0	7.5	7.2	7.3	7.1	7.4	7.3	7.0	6.9	6.9	6.7
8	7.4	7.1	7.5	7.1	7.4	7.2	7.4	7.1	7.0	6.9	6.8	6.7
9	7.5	7.2	7.4	7.2	7.3	7.1	7.1	7.0	7.0	6.9	6.9	6.8
10	7.4	7.2	7.4	7.3	7.3	7.0	7.2	7.1	6.9	6.8	6.9	6.7
11	7.3	7.1	7.4	7.1	7.4	7.0	7.2	7.1	7.0	6.8	6.9	6.8
12	7.4	7.1	7.3	7.1	7.3	7.1	7.2	7.1	7.0	6.9	7.0	6.9
13	7.4	7.0	7.4	7.2	7.3	7.2	7.1	7.0	7.0	6.9	7.0	6.7
14	7.3	7.2	7.2	7.0	7.4	7.2	7.2	7.0	7.1	6.9	6.9	6.8
15	7.9	6.8	7.3	7.0	7.3	7.1	7.2	7.1	7.1	6.9	7.0	6.9
16	7.3	7.0	7.4	7.2	7.4	7.2	7.2	7.0	7.0	6.9	7.0	6.8
17	7.4	7.2	7.3	7.1	7.4	7.2	7.2	7.0	6.9	6.8	7.0	6.9
18	7.5	7.3	7.3	7.0	7.4	7.1	7.5	7.1	6.8	6.7	7.0	6.9
19	7.4	7.2	7.2	7.1	7.4	7.2	7.2	7.1	7.0	6.7	7.1	6.9
20	7.4	7.0	7.3	7.2	7.4	7.3	7.2	7.1	6.9	6.7	7.0	6.8
21	7.5	7.1	7.4	7.3	7.5	7.3	7.2	7.1	7.2	6.6	7.0	6.9
22	7.5	7.2	7.3	6.9	7.4	7.2	7.2	7.1	7.0	6.8	7.0	6.7
23	7.4	7.2	7.3	7.2	7.6	7.3	7.2	7.0	7.0	6.9	6.9	6.8
24	7.4	7.3	7.4	7.3	7.4	7.3	7.1	7.0	7.0	6.8	6.9	6.9
25	7.5	7.3	7.4	7.2	7.4	7.2	7.1	6.9	7.0	6.8	7.0	6.9
26	7.5	7.3	7.3	7.2	7.5	7.2	7.1	7.0	7.0	6.8	7.0	6.9
27	7.3	7.2	7.3	7.0	7.6	7.4	7.1	6.9	7.0	6.8	6.9	6.9
28	7.4	7.3	7.2	6.9	7.5	7.3	7.1	7.0	7.0	6.8	6.9	6.8
29	7.4	7.0	7.2	7.0	7.4	7.2	7.1	7.0	7.2	7.0	6.9	6.7
30	7.4	7.2	7.3	7.0	7.4	7.2	7.1	7.0	7.0	6.8	6.8	6.7
31	---	---	7.2	7.1	---	---	7.2	6.8	6.9	6.8	---	---
MONTH	7.9	6.8	7.9	6.9	7.6	7.0	7.5	6.8	7.2	6.6	7.1	6.6
YEAR	8.1	6.4										

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	9.7	7.9	9.4	8.0	11.7	10.9	7.5	6.0	12.4	10.8
2	---	---	9.1	7.8	9.1	9.0	11.2	10.5	6.0	5.0	12.5	10.6
3	---	---	7.8	7.1	9.3	8.5	10.9	10.2	5.0	3.6	12.5	10.4
4	---	---	7.6	7.0	10.0	9.0	10.8	9.8	5.1	3.7	12.9	10.7
5	---	---	7.4	6.7	11.4	9.8	11.3	10.8	7.2	4.2	13.1	11.0
6	---	---	7.1	6.4	11.7	11.4	11.4	10.7	8.6	6.8	12.7	10.6
7	---	---	7.2	5.8	12.3	11.4	11.9	10.6	9.2	8.6	12.4	10.6
8	---	---	7.7	6.5	11.4	9.9	---	---	10.0	9.2	12.8	10.7
9	3.3	3.0	7.8	6.1	11.2	10.5	---	---	9.6	9.0	12.9	10.9
10	3.2	2.8	7.0	5.7	11.0	10.2	---	---	9.1	7.4	11.3	10.8
11	3.7	2.7	6.5	6.0	11.0	10.0	---	---	8.4	6.2	11.0	10.5
12	3.9	2.7	6.5	5.1	11.0	10.2	---	---	7.1	5.2	10.9	10.4
13	5.0	1.6	6.5	5.4	11.3	11.0	9.9	8.2	8.3	7.0	10.8	10.1
14	4.8	4.0	7.8	5.4	11.4	11.1	8.9	8.0	8.4	7.9	10.8	10.2
15	5.2	3.9	10.1	7.3	11.2	10.8	9.1	8.3	8.3	7.7	10.2	9.6
16	5.3	4.6	10.8	10.1	11.7	9.9	9.3	8.5	7.9	7.0	9.8	9.1
17	5.7	4.6	10.9	10.3	11.6	11.3	9.2	8.5	8.0	6.9	10.1	9.3
18	5.5	4.7	10.3	9.8	11.5	11.1	8.5	6.9	9.0	8.0	9.9	9.0
19	5.1	3.9	---	---	11.1	10.9	6.9	5.8	9.6	9.0	9.4	8.5
20	4.2	3.3	---	---	12.1	10.0	7.2	6.3	10.1	9.2	10.0	8.6
21	4.0	3.0	---	---	12.3	10.9	8.2	7.1	10.5	9.8	10.4	9.6
22	4.3	3.1	---	---	10.9	10.5	7.1	5.2	12.2	10.1	10.6	9.5
23	4.4	3.3	---	---	10.8	10.2	6.5	4.7	11.9	10.3	10.0	8.3
24	4.1	3.3	---	---	11.7	10.4	7.6	5.8	11.8	10.1	9.7	8.6
25	4.1	3.2	9.9	8.4	11.9	11.4	7.7	6.4	11.9	10.4	9.4	8.4
26	3.7	3.2	9.1	8.2	12.5	11.5	8.8	7.0	11.6	10.7	9.1	8.0
27	3.3	2.5	8.8	8.0	12.4	12.1	8.6	8.5	12.0	10.6	10.0	8.4
28	3.6	2.3	9.0	7.5	12.2	11.7	8.5	5.4	12.2	10.9	10.3	9.5
29	3.6	3.3	9.4	8.2	11.8	11.2	6.9	5.8	---	---	10.1	8.9
30	4.9	2.7	9.6	7.7	11.7	11.2	7.8	6.7	---	---	9.2	7.1
31	8.3	4.2	---	---	11.6	11.1	7.8	7.4	---	---	7.2	6.6
MONTH	---	---	10.9	5.1	12.5	8.0	11.9	4.7	12.2	3.6	13.1	6.6

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.6	5.6	4.5	4.4	0.6	0.4	1.9	1.4	4.0	2.8	1.4	1.0
2	5.6	5.0	3.9	3.4	1.5	0.4	1.8	1.6	3.4	2.8	3.1	1.4
3	6.9	4.4	4.3	3.5	2.6	0.6	3.4	1.6	2.9	2.5	3.4	1.9
4	6.7	5.4	3.7	2.5	2.5	0.7	2.8	1.9	3.5	2.6	3.3	1.8
5	6.6	5.4	3.2	2.1	1.8	0.6	2.6	1.7	3.0	2.3	3.3	1.9
6	5.4	4.1	5.0	1.1	2.7	1.2	2.1	1.8	2.7	1.8	3.0	1.8
7	4.6	3.2	5.2	4.7	2.9	2.1	1.8	1.8	4.6	1.5	2.6	1.5
8	4.5	3.4	5.6	4.2	3.8	1.9	2.9	1.8	3.5	2.3	3.0	1.0
9	4.1	3.3	4.9	4.5	3.7	2.5	2.2	1.0	3.2	2.0	2.9	1.7
10	4.2	3.5	4.5	3.7	2.9	2.0	2.5	1.2	2.9	1.4	2.5	1.3
11	4.4	3.1	3.7	2.0	2.0	1.1	2.6	0.7	3.4	2.0	2.8	1.0
12	4.5	2.9	4.2	1.8	2.1	0.9	2.6	1.6	3.3	2.0	2.5	1.8
13	3.7	2.8	3.9	3.3	1.9	1.4	2.2	1.3	3.2	2.0	2.4	1.3
14	3.3	1.7	3.5	3.0	1.6	0.9	2.0	1.1	4.8	1.6	2.0	0.9
15	2.8	2.4	3.4	2.0	1.4	0.9	2.8	1.3	3.5	2.0	2.5	1.3
16	2.8	2.5	2.7	2.0	3.0	1.0	2.6	2.0	3.1	1.6	2.5	1.5
17	3.3	2.7	2.2	1.5	2.4	1.6	3.2	1.9	3.3	1.3	2.7	1.7
18	3.9	3.5	1.7	1.0	2.0	1.0	3.5	2.6	3.3	1.7	2.8	2.3
19	4.4	3.7	2.2	1.1	1.6	1.0	2.7	1.7	6.2	1.7	2.5	1.6
20	3.5	3.2	2.1	1.0	2.2	1.2	2.2	1.4	2.3	1.6	2.2	1.4
21	3.6	2.2	2.1	1.7	1.9	0.7	3.3	1.8	3.6	0.7	2.0	1.3
22	3.0	2.7	2.5	1.2	1.5	1.1	3.4	2.6	3.2	2.2	2.0	1.4
23	2.9	1.8	2.3	1.1	1.9	1.2	3.1	2.0	3.6	1.7	2.5	1.2
24	2.8	1.3	1.6	1.1	1.9	0.9	3.3	1.6	3.6	2.2	2.7	1.7
25	2.7	1.9	1.2	0.6	1.7	1.2	3.2	2.7	4.0	2.1	2.9	1.8
26	2.2	1.3	3.3	0.8	2.1	1.7	2.9	1.9	3.1	2.4	2.3	2.0
27	1.9	1.3	3.1	2.1	2.8	2.1	2.4	1.5	2.9	2.0	2.3	1.8
28	3.2	1.1	2.1	1.2	2.1	1.2	3.8	1.7	3.4	1.7	2.7	1.5
29	4.0	3.2	2.1	1.0	1.9	1.3	3.2	2.7	3.1	2.2	1.8	1.3
30	4.4	3.5	1.6	0.9	1.8	1.5	3.3	2.6	3.2	2.3	1.7	1.0
31	---	---	1.0	0.5	---	---	2.9	2.3	2.4	1.4	---	---
MONTH	6.9	1.1	5.6	0.5	3.8	0.4	3.8	0.7	6.2	0.7	3.4	0.9
YEAR	13.1	0.4										

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	17.5	16.0	12.0	10.0	7.5	6.0	10.0	8.5	7.0	4.5
2	---	---	18.5	16.0	13.5	11.5	8.0	6.5	11.5	9.5	7.0	6.0
3	---	---	18.5	17.5	13.5	12.5	8.5	7.0	15.5	11.5	6.5	4.5
4	---	---	19.0	17.5	13.0	10.0	8.5	7.0	16.5	15.0	5.0	4.0
5	---	---	19.0	16.5	10.0	8.5	7.0	5.5	16.5	8.0	5.5	4.5
6	---	---	19.0	16.5	8.5	7.0	5.5	5.0	8.0	5.0	5.5	5.0
7	---	---	19.0	18.0	7.5	7.0	7.0	5.0	5.0	4.5	5.5	3.5
8	---	---	19.5	17.5	9.5	7.5	8.5	6.0	6.0	5.0	4.0	3.0
9	29.5	28.5	20.0	17.5	10.5	9.0	9.0	7.5	8.0	5.5	4.5	3.0
10	29.0	27.0	20.5	19.5	10.5	10.0	---	---	9.0	6.5	6.0	4.5
11	27.0	25.0	21.0	19.5	11.0	10.0	---	---	12.0	9.0	6.5	5.5
12	26.5	24.5	21.5	20.5	11.0	7.5	---	---	12.5	12.0	6.5	6.0
13	26.5	21.5	21.0	19.5	7.5	6.0	12.5	10.5	12.0	8.5	6.0	5.5
14	24.5	24.0	20.5	17.5	7.0	6.0	13.0	11.0	8.5	7.5	6.5	3.5
15	24.5	22.5	17.5	11.0	7.5	7.0	11.0	9.5	10.0	8.0	8.0	6.5
16	22.5	20.5	11.5	10.5	7.5	7.0	10.0	8.5	12.0	10.0	8.0	7.5
17	21.0	19.0	10.5	10.0	7.5	7.0	10.0	9.5	12.0	10.5	8.0	7.5
18	22.0	18.5	10.5	10.0	7.5	7.0	11.0	9.5	11.0	8.0	9.0	7.5
19	23.0	19.5	---	---	7.5	7.0	11.5	10.5	8.0	4.5	9.5	8.5
20	23.0	21.5	---	---	7.5	7.0	13.0	11.5	4.5	2.5	8.5	7.0
21	24.5	23.0	---	---	8.0	7.0	14.0	13.0	2.5	2.0	8.0	5.5
22	25.0	23.5	---	---	8.0	7.5	16.0	14.0	3.5	2.5	8.0	7.0
23	25.5	24.5	---	---	8.0	7.5	16.5	15.5	3.5	3.5	9.0	7.5
24	25.5	24.5	---	---	8.0	6.0	17.0	15.5	4.0	3.5	10.5	8.5
25	25.5	24.0	11.0	10.0	6.0	5.0	17.5	16.0	6.0	4.0	11.0	9.5
26	25.0	23.5	10.5	9.5	5.0	4.0	16.5	12.5	6.0	5.5	12.0	9.0
27	25.0	24.0	11.0	9.5	5.0	4.0	12.5	10.0	6.0	5.5	13.0	10.5
28	25.0	24.0	12.5	10.5	6.0	4.5	13.0	11.5	6.0	5.5	12.5	11.0
29	25.5	24.0	12.0	11.5	7.0	6.0	14.0	11.5	---	---	13.0	11.5
30	25.5	21.0	11.0	10.0	7.0	6.0	13.5	12.0	---	---	14.5	12.5
31	21.0	17.0	---	---	7.0	6.0	12.0	10.0	---	---	17.0	13.5
MONTH	---	---	21.5	9.5	13.5	4.0	17.5	5.0	16.5	2.0	17.0	3.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	16.5	27.0	25.0	34.0	30.5	38.0	36.5	28.5	26.5	32.0	29.5
2	19.0	16.5	26.0	24.0	32.5	31.5	36.5	34.0	27.5	26.5	32.5	30.0
3	18.5	17.5	24.0	22.5	32.0	27.5	35.5	32.0	27.5	26.5	32.5	30.0
4	18.0	16.5	26.5	23.0	36.0	31.5	33.5	31.0	27.0	26.5	32.5	30.5
5	19.0	16.5	28.0	25.5	37.5	33.5	34.0	31.0	28.5	25.5	31.5	29.5
6	21.5	18.0	27.5	20.0	36.0	29.5	35.5	31.5	29.0	25.5	32.0	29.5
7	22.0	20.0	22.5	20.5	32.5	30.0	36.0	32.5	29.0	26.0	31.5	30.0
8	25.0	21.0	20.5	18.5	32.5	28.5	37.0	34.0	29.5	26.0	32.5	29.5
9	25.0	23.0	22.0	18.5	29.5	27.0	36.5	34.5	30.0	27.0	32.0	29.5
10	24.5	21.5	25.0	20.5	32.0	27.0	35.0	33.5	29.5	28.0	32.0	29.0
11	26.0	22.5	27.5	23.5	33.5	30.0	33.5	27.0	29.5	27.5	31.5	30.0
12	28.5	23.5	27.5	23.0	33.5	32.5	32.5	29.5	29.0	26.5	30.0	28.5
13	29.0	25.5	25.0	22.5	34.0	32.5	34.0	30.5	29.0	25.5	28.0	25.0
14	25.0	23.5	26.0	22.5	35.0	32.5	34.5	32.0	29.0	25.5	26.5	25.0
15	27.0	23.5	27.5	23.5	35.0	33.0	36.0	32.5	29.5	27.0	27.0	24.5
16	27.0	25.0	28.0	26.0	35.0	32.0	36.5	33.0	29.5	26.0	26.0	25.0
17	25.5	23.5	30.0	25.5	35.5	32.5	35.0	32.0	31.0	26.0	27.0	25.5
18	26.5	23.5	32.5	28.0	36.5	32.5	33.0	30.5	30.5	28.0	26.5	25.0
19	27.0	23.5	34.0	31.0	37.0	34.0	32.5	29.0	31.0	28.5	26.0	24.5
20	28.5	25.0	34.0	32.0	37.5	34.5	32.0	28.0	30.5	29.0	26.5	25.5
21	27.5	25.5	32.5	31.5	36.0	28.0	32.0	30.0	30.5	28.5	27.5	25.0
22	25.5	23.5	31.5	29.5	34.5	31.0	33.0	30.0	28.5	25.5	29.0	26.0
23	28.0	23.5	32.0	29.0	35.0	31.5	32.0	30.5	28.0	23.5	28.5	26.5
24	27.0	24.0	31.0	29.0	37.0	32.5	31.0	30.0	28.5	25.5	28.0	25.5
25	25.0	23.5	31.0	28.5	38.0	35.0	32.5	29.5	28.0	26.0	25.5	23.5
26	24.5	23.5	28.5	26.5	37.0	35.0	33.0	31.5	28.5	27.0	25.0	23.5
27	26.5	23.0	27.5	26.5	37.0	33.5	33.0	30.5	28.5	27.0	28.0	24.5
28	28.0	25.0	30.0	27.0	38.5	35.0	33.5	30.5	28.0	26.0	28.0	24.5
29	26.5	25.5	30.5	27.5	39.0	36.0	33.0	31.0	28.5	26.0	30.0	27.5
30	27.5	26.0	31.5	28.5	38.5	36.0	31.0	28.5	29.5	27.0	31.0	29.0
31	---	---	32.5	28.5	---	---	30.5	28.5	31.5	27.5	---	---
MONTH	29.0	16.5	34.0	18.5	39.0	27.0	38.0	27.0	31.5	23.5	32.5	23.5
YEAR	39.0	2.0										

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO

LOCATION.--Lat 40°43'36", long 81°31'47", Stark County, on left bank at Navarre water treatment plant, 800 ft upstream from bridge on Elton Road at Navarre, 3.5 miles downstream from gaging station at Massillon, 1.2 miles downstream from Pigeon Run, and just upstream from Wolf Creek.

DRAINAGE AREA.--534 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1968 to September 1971.
Water temperatures: March 1968 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 10,300 micromhos Sept. 9; minimum, 663 micromhos Feb. 22.
pH: Maximum, 8.2 Feb. 3, 4, June 28; minimum, 5.7 July 18, 20.
Dissolved oxygen: Maximum, 10.9 mg/l Dec. 16, 18, Mar. 24; minimum, 0.0 mg/l June 2-4, July 8, 11, 15, 17-22.
Water temperatures: Maximum, 28.5°C June 28; minimum, 0.5°C Jan. 27-31.

Period of record:
Specific conductance (1969-71): Maximum, 16,700 micromhos Jan. 27, 1970; minimum, 450 micromhos June 13, 1970.
pH (1968-69, 1970-71): Maximum, 8.4 Jan. 16, 1969; minimum, 4.6 Aug. 17, 1969.
Dissolved oxygen (1970-71): Maximum, 10.9 mg/l Dec. 16, 18, 1970, Mar. 24, 1971; minimum, 0.0 mg/l on several days during June and July 1971.
Water temperatures (1968-69, 1970-71): Maximum, 30.0°C June 27, 28, 1969; minimum, freezing point on several days during December 1968 and January 1969.

REMARKS.--Continuous water-quality recorder operated since March 1968. Minimum recorded specific conductance value of 240 micromhos occurred July 5, 1969. Minimum recorded pH of 3.9 occurred Oct. 26, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected three times during the year to further define the quality of water. Records of discharge are given for 03117000 Tuscarawas River at Massillon, Ohio (drainage area 518 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)
OCT.												
06...	1500	195	--	--	--	--	--	--	--	--	--	--
10...	1000	170	220	0	180	1900	2.7	1.5	3770	1400	1200	5930
19...	1000	209	198	0	150	1200	.5	14	2670	1000	840	4050
NOV.												
20...	1415	421	165	0	140	1100	1.5	12	2400	1000	860	3660
28...	1000	270	189	0	150	1000	.5	14	2480	820	660	3640
DEC.												
04...	1400	1100	146	0	120	680	1.1	14	1590	690	570	2420
21...	1000	521	152	0	130	1000	.5	11	2220	940	820	3290
JAN.												
05...	1100	1030	137	0	100	680	.6	13	1530	650	540	2470
23...	1000	235	190	0	170	1700	1.7	14	3360	1400	1240	5190
FEB.												
03...	1405	115	228	0	160	2000	2.8	14	4030	1600	1410	6350
24...	1400	3450	83	0	53	200	.5	11	592	250	182	876
MAR.												
16...	1300	1530	100	0	86	250	.9	17	746	330	250	1130
27...	1000	560	145	0	130	900	.6	14	2020	810	690	3210
APR.												
15...	1110	316	143	0	120	1100	2.7	13	2310	1000	880	3630
22...	0900	231	159	0	140	1800	2.6	8.5	3580	1500	1400	5430
MAY												
07...	1300	250	149	0	96	1000	1.2	12	2020	940	860	3370
24...	0900	186	178	0	120	2100	1.0	8.1	4040	1800	1600	6270
JUNE												
23...	1500	146	151	0	130	1300	4.8	21	2280	880	760	3780
25...	1500	133	127	0	140	2500	4.2	15	4390	1800	1700	6860
JULY												
16...	1300	167	106	0	96	1800	3.1	17	3200	1300	1200	5180
28...	0900	167	109	0	130	3200	6.2	14	5220	2000	1900	8700
AUG.												
07...	1600	121	146	0	150	2300	2.6	16	4220	1600	1500	7250
16...	0900	90	96	0	120	3200	.5	9.0	5140	2200	2100	8870
SEP.												
08...	1000	121	120	0	150	3400	2.0	13	5660	1700	1600	9550
22...	1045	199	180	0	140	920	1.6	14	1880	700	550	3180

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.								
06...	8.0	0	8	6	0	1	1.7	100
JUNE								
03...	78	--	--	--	--	--	9.8	--
AUG.								
04...	--	--	--	--	--	--	1.7	--

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7290	6390	3450	2580	3770	2150	3290	2720	---	---	2070	1740
2	7320	4830	4140	2880	3420	2430	4370	2840	---	---	3150	1950
3	5840	4850	3630	1080	3480	2460	3980	2750	6200	5330	2660	1820
4	6130	5020	2280	1620	2920	1420	3500	2720	6260	4850	3400	1780
5	5580	4890	2310	1680	2800	1870	2830	1660	---	---	3990	3180
6	6020	5580	2490	1830	3140	2630	3130	2020	---	---	3690	2760
7	5750	5210	3630	2340	3050	2180	4650	3130	---	---	2760	1440
8	6100	5530	3660	2910	3510	2730	6210	4530	---	---	1760	1460
9	5640	5130	3570	3180	3600	2760	5490	4860	---	---	2630	1730
10	5990	4910	3390	3120	3390	2820	5530	5140	---	---	2830	2560
11	5880	2820	3870	3240	4140	3060	5330	4580	---	---	2940	2730
12	5350	4360	3900	2880	3480	1020	5050	4060	6050	3950	3220	2530
13	4840	1120	4470	3270	3080	1130	4580	3950	4790	3050	2780	1220
14	7670	3110	4890	3390	2870	2630	4440	3420	4220	2990	1220	796
15	7440	2760	3390	1350	3020	1910	3420	2560	5090	3710	1210	883
16	4000	3520	2880	1320	2750	2060	3810	3060	4310	3650	1240	909
17	4870	3340	3120	2850	3020	2420	5300	3770	3980	3560	1630	1210
18	4670	3560	---	---	2930	2420	4480	4000	3950	1970	2070	1590
19	5310	3630	---	---	3250	2710	5160	4260	2200	850	2130	1650
20	5760	4830	3990	3360	3370	3070	5200	4750	1980	1230	2210	1790
21	6210	4550	4440	3420	3460	2350	5740	4750	1860	1140	2300	1880
22	7380	4680	4860	3440	2800	2320	5900	4910	1140	663	2150	1670
23	4830	3840	4640	3290	2320	1300	5610	4830	995	784	1990	1450
24	5940	4020	4000	3400	2170	1390	5790	5010	1030	846	2260	1990
25	6330	4860	5690	3770	2700	2100	5770	4870	1210	1000	2890	2140
26	6090	4260	4740	4080	3030	2220	5830	4360	1310	1160	3210	2790
27	5730	4410	4820	4040	2460	1950	5420	4070	1530	1170	3240	3000
28	5340	4530	4430	3710	2610	2190	6310	4120	1740	1320	---	---
29	58[illegible]	4710	4090	2140	3000	2220	5240	4700	---	---	3780	3120
30	4950	3750	2870	1130	3180	2700	5090	4370	---	---	3700	3250
31	4050	2790	---	---	3980	2750	4880	4790	---	---	4030	3520
MONTH	7670	1120	5690	1080	4140	1020	6310	1660	---	---	4030	796

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4270	3670	5070	4230	4520	4100	5250	4290	8310	7590	7980	7290
2	4330	3700	5250	4560	5270	4280	5220	4590	7790	7010	8610	7110
3	3880	3730	5520	4680	5290	4210	5460	5100	7540	7000	8600	7700
4	3730	3640	5280	4800	5170	4830	6420	5250	8880	6090	8650	7540
5	4520	3680	5220	4350	6370	4030	7260	5550	7940	7130	9010	7540
6	4820	4040	4890	3000	7800	4640	7290	6300	8190	7080	7980	7650
7	4820	3900	4500	2940	6020	5120	7710	6760	7400	6410	9110	7850
8	4470	3930	3930	2760	6030	5880	7600	6370	7430	6500	9100	7990
9	4800	4110	3270	2700	6840	4860	7000	6100	7580	7010	10300	5560
10	4710	4110	4920	2700	7410	5070	7120	6100	8440	7090	7170	5520
11	4380	4140	4530	3330	7120	5080	6970	2740	8740	7510	8240	6830
12	4710	4200	4290	3510	6700	5380	5110	3700	8530	7180	8680	7510
13	5010	4440	4520	2840	6940	6370	4300	3640	7340	7190	7720	4180
14	5340	4170	3760	3040	7880	5930	4960	4300	7740	6870	8490	4110
15	4710	3900	4230	3300	6720	5220	5830	4960	8260	7270	4700	3560
16	4800	4290	4460	3860	7160	5450	5890	4960	9200	7040	4810	4010
17	5430	4500	4870	4240	6910	6610	7420	5500	9290	8270	5800	4820
18	8400	4830	4650	3780	6610	5040	7780	5800	9600	8610	6540	5730
19	5520	4500	5410	3760	5180	4760	6370	5080	9180	7200	6980	6050
20	5370	5010	5400	4110	6400	4840	7420	5530	8340	7440	8110	6460
21	5850	5280	5850	4440	5250	4680	7480	5500	8350	8020	7960	3160
22	6270	4890	5580	4440	6740	3950	5710	5020	8200	7780	4800	3060
23	6030	4380	5840	5060	4530	3300	5590	5080	9850	8080	9630	4680
24	5190	4470	6490	5680	5490	4530	5920	5140	8990	7310	5970	4620
25	5610	4680	6130	5440	5720	5120	---	---	9080	7100	6660	5760
26	5010	4080	7020	5100	6700	5530	5330	4400	7900	6580	7520	6530
27	5070	2580	5610	5130	5850	5580	6410	5040	7360	3210	7310	6620
28	4920	4290	5480	4250	6440	5570	8730	6420	6260	4760	7190	6140
29	5100	4770	4250	2950	6100	2230	7460	6620	6790	5320	6670	5860
30	5340	4440	4300	3760	6270	5190	7640	6620	7830	6780	6150	5130
31	---	---	4440	3600	---	---	8290	7600	7950	7230	---	---
MONTH	8400	2580	7020	2700	7880	2230	8730	2740	9850	3210	10300	3060
YEAR	10300	663										

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.9	6.5	7.0	6.5	7.2	7.0	7.4	6.6	---	---	7.4	7.1
2	6.9	6.2	6.8	6.4	7.3	6.7	7.8	7.1	---	---	7.4	7.0
3	6.8	5.8	7.0	6.4	7.1	6.7	7.8	7.1	8.2	7.1	7.3	6.8
4	6.7	6.5	7.0	6.8	7.1	6.6	7.5	7.0	8.2	7.2	7.6	7.1
5	6.8	6.5	6.9	6.7	7.2	6.6	7.1	6.8	---	---	8.1	7.3
6	6.8	5.9	6.9	6.7	7.4	7.2	7.0	6.6	---	---	7.7	7.1
7	6.8	6.6	7.0	6.5	7.4	7.0	7.1	6.7	---	---	7.6	7.3
8	6.9	6.6	7.0	6.7	7.4	7.1	7.4	6.8	---	---	7.7	7.2
9	6.9	6.6	7.0	6.7	7.4	6.7	7.3	6.9	---	---	7.6	7.2
10	6.9	6.3	6.7	6.5	7.0	6.7	7.2	7.0	---	---	7.6	7.3
11	7.1	6.6	7.0	6.6	7.0	6.3	7.1	6.5	---	---	7.5	7.3
12	6.8	6.6	6.9	6.6	7.1	6.4	7.0	6.5	7.7	7.4	7.7	7.3
13	6.9	6.2	6.8	6.2	7.2	7.1	7.1	6.5	---	---	7.9	7.4
14	6.7	6.0	7.1	6.2	7.1	6.8	7.2	6.9	---	---	7.5	7.2
15	6.6	6.3	6.9	6.3	7.0	6.8	6.9	6.5	---	---	7.4	7.1
16	6.8	6.1	6.8	6.7	7.0	6.7	7.1	6.4	7.1	---	7.6	7.1
17	6.9	6.6	6.7	6.7	6.9	6.5	7.3	6.7	7.2	6.9	7.4	6.7
18	6.9	6.8	---	---	7.2	6.6	7.2	6.9	7.7	7.0	7.4	7.0
19	7.0	6.8	---	---	7.2	6.6	7.1	7.0	7.3	7.0	7.3	7.2
20	7.1	6.8	7.0	6.7	7.3	6.9	7.1	6.8	7.3	7.0	7.5	7.1
21	7.2	6.7	7.1	5.9	7.2	6.9	7.1	6.5	7.2	7.0	7.5	7.1
22	7.1	6.4	8.0	6.8	8.1	6.9	7.4	6.5	7.1	7.0	7.5	7.0
23	7.1	6.7	7.3	7.1	8.1	6.5	7.4	6.4	7.1	6.9	7.4	7.0
24	7.1	6.5	7.1	6.6	7.1	6.6	7.2	6.8	7.6	7.0	7.4	7.0
25	7.4	7.0	7.2	6.5	7.2	7.1	7.2	6.6	7.8	7.2	7.4	7.0
26	7.5	6.9	7.2	6.2	7.2	7.1	6.9	6.7	7.3	7.1	7.5	7.1
27	7.2	6.8	7.4	6.9	7.2	7.1	7.0	6.6	7.4	7.0	7.4	7.2
28	7.0	6.5	7.1	6.8	7.5	7.1	7.3	6.6	7.3	7.0	---	---
29	6.6	6.2	7.1	6.8	7.1	6.8	7.0	6.7	---	---	7.4	7.1
30	6.4	6.0	7.3	6.9	7.8	6.7	7.0	6.4	---	---	7.3	7.1
31	6.7	6.1	---	---	7.1	6.5	7.0	6.9	---	---	7.3	7.2
MONTH	7.5	5.8	8.0	5.9	8.1	6.3	7.8	6.4	---	---	8.1	6.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.3	7.0	6.9	6.5	6.9	6.5	7.5	6.9	7.0	6.4	7.2	6.6
2	7.2	6.9	6.9	6.5	7.1	6.6	7.4	6.3	7.5	7.0	7.0	6.5
3	7.2	7.1	6.8	6.5	7.0	6.6	7.7	6.0	7.1	6.8	7.0	6.4
4	7.4	7.2	6.9	6.5	7.1	6.8	7.4	5.9	7.0	6.6	6.9	6.4
5	7.4	7.2	7.0	6.4	7.2	6.6	7.3	6.3	7.1	6.7	7.4	6.9
6	7.5	7.1	7.0	6.4	7.1	6.6	7.5	6.3	7.2	6.7	7.8	7.0
7	7.6	7.1	7.1	6.7	7.1	6.8	7.9	6.1	7.1	6.4	7.4	7.0
8	7.3	6.9	6.9	6.5	7.1	6.8	7.5	6.3	7.7	6.5	7.3	6.9
9	7.2	6.8	7.1	6.6	7.3	6.8	7.8	6.6	7.6	6.8	7.1	6.8
10	7.2	6.7	6.9	6.6	7.2	6.8	7.[illegible]	6.5	7.2	6.8	7.1	6.7
11	7.1	6.6	6.9	6.5	7.2	6.8	7.0	5.8	7.2	6.7	7.0	6.8
12	7.2	6.8	6.9	6.4	7.0	6.4	7.1	5.8	7.3	7.0	7.2	6.9
13	7.1	6.7	7.0	6.6	7.1	6.5	6.9	5.9	7.3	6.9	7.3	6.1
14	7.3	6.8	7.0	6.5	7.2	6.8	7.2	6.0	7.3	6.8	7.1	6.6
15	7.1	6.6	7.1	6.6	7.1	6.5	7.3	5.8	7.8	6.9	7.0	6.9
16	6.9	6.4	6.9	6.5	7.1	6.4	7.3	5.8	7.7	7.0	7.0	6.8
17	6.9	6.4	6.9	6.1	7.1	6.6	7.1	6.2	7.6	6.9	7.1	6.6
18	7.5	6.0	6.9	6.4	7.1	6.5	7.2	5.7	7.5	6.9	7.0	6.4
19	7.1	6.4	6.9	6.6	7.2	6.7	6.9	6.0	7.2	6.9	6.9	6.7
20	7.0	6.3	7.0	6.8	7.1	6.2	7.0	5.7	7.1	6.6	6.9	6.6
21	7.0	6.6	7.0	6.6	7.2	6.9	7.1	5.9	7.2	6.7	7.1	6.6
22	7.0	6.6	7.1	6.6	7.2	6.8	7.1	5.9	7.7	6.8	6.8	6.6
23	7.1	6.6	6.8	6.2	7.1	6.7	7.3	6.3	7.5	7.0	6.9	6.2
24	7.0	6.6	7.1	6.5	7.1	6.5	7.1	6.3	7.3	6.6	7.0	6.1
25	6.9	6.5	6.9	6.6	7.1	6.7	---	---	7.0	6.7	6.9	6.7
26	7.0	6.5	7.1	6.8	7.1	6.3	7.0	6.6	6.9	6.8	7.0	6.8
27	6.9	6.6	7.1	6.9	6.8	6.2	7.0	6.6	7.2	6.5	7.1	6.8
28	7.0	6.5	7.0	6.5	8.2	6.6	6.9	6.5	7.0	6.6	7.0	6.7
29	7.0	6.7	6.8	6.5	7.7	6.3	7.0	6.3	7.1	6.7	7.1	6.8
30	6.9	6.5	7.0	6.6	8.1	6.7	7.0	6.5	7.2	6.7	7.0	6.7
31	---	---	7.1	6.7	---	---	7.0	6.5	7.3	6.8	---	---
MONTH	7.6	6.0	7.1	6.1	8.2	6.2	7.9	5.7	7.8	6.4	7.8	6.1
YEAR	8.2	5.7										

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	9.7	9.3
2	---	---	---	---	---	---	---	---	---	---	9.5	8.9
3	---	---	---	---	---	---	---	---	8.7	7.8	9.7	9.1
4	---	---	---	---	---	---	9.0	8.8	8.2	7.3	10.1	9.7
5	---	---	---	---	---	---	10.6	8.9	---	---	9.8	9.1
6	---	---	---	---	---	---	10.6	9.9	---	---	9.1	7.8
7	---	---	---	---	---	---	10.5	9.7	---	---	10.1	8.0
8	---	---	---	---	---	---	10.0	9.3	---	---	10.5	9.4
9	---	---	---	---	9.4	8.3	10.1	9.0	---	---	10.2	9.0
10	---	---	---	---	8.7	8.2	9.7	9.0	---	---	10.2	9.7
11	---	---	---	---	8.4	7.9	9.2	8.3	---	---	10.1	9.3
12	---	---	---	---	10.3	8.1	8.6	7.6	9.3	8.7	10.3	8.6
13	---	---	---	---	10.7	10.3	8.8	7.8	10.8	9.3	10.6	10.3
14	---	---	---	---	10.5	10.0	8.0	7.3	10.2	9.6	10.8	10.2
15	---	---	---	---	10.2	9.5	8.6	7.8	10.7	9.4	10.2	9.4
16	---	---	---	---	10.9	9.3	8.8	8.3	9.9	8.9	9.9	7.7
17	---	---	---	---	10.3	9.4	8.6	8.2	9.7	8.6	10.0	8.1
18	---	---	---	---	10.9	8.3	8.7	8.3	10.3	9.3	10.2	8.7
19	---	---	---	---	8.9	8.0	8.9	8.4	10.5	9.7	10.0	9.4
20	---	---	---	---	8.9	8.1	8.6	8.2	10.4	10.0	10.2	9.5
21	---	---	---	---	9.0	8.2	8.3	7.5	10.1	9.9	10.3	5.8
22	---	---	---	---	9.9	8.1	7.9	7.1	10.7	10.0	10.2	9.4
23	---	---	---	---	8.8	7.0	8.0	7.0	10.3	10.1	10.0	9.5
24	---	---	---	---	9.7	8.9	7.6	6.9	10.4	10.1	10.9	9.6
25	---	---	---	---	9.5	8.0	7.4	6.7	10.1	9.3	10.2	9.7
26	---	---	---	---	9.7	8.0	7.0	5.8	9.3	8.8	10.6	8.2
27	---	---	---	---	9.7	9.5	7.1	6.7	9.3	8.7	9.5	9.0
28	---	---	---	---	9.5	8.8	7.5	7.0	9.6	9.2	---	---
29	---	---	---	---	9.1	8.5	7.1	6.4	---	---	8.3	7.5
30	---	---	---	---	8.9	8.4	6.9	6.3	---	---	8.0	7.0
31	---	---	---	---	---	---	8.4	---	---	---	7.4	6.1
MONTH	---	---	---	---	---	---	10.6	5.8	---	---	10.9	6.1

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.3	5.3	6.4	3.2	2.5	1.0	2.6	0.3	4.8	0.5	4.4	0.1
2	7.7	4.8	5.3	3.2	1.0	0.0	1.0	0.3	4.2	0.3	4.5	0.1
3	6.9	6.6	7.1	2.8	1.8	0.0	3.6	0.2	3.4	0.1	2.1	0.1
4	8.0	---	7.1	3.5	1.0	0.0	4.5	0.5	3.4	0.1	2.5	0.2
5	8.8	7.5	6.7	2.2	1.6	0.1	7.8	0.6	3.1	0.2	6.5	0.2
6	8.9	7.4	4.5	2.4	2.6	0.2	7.5	0.1	4.9	0.2	9.6	0.1
7	9.4	7.1	5.0	1.7	2.2	0.2	5.5	0.3	5.9	0.1	6.2	0.1
8	8.5	6.5	4.8	3.6	1.5	0.2	3.3	0.0	6.3	0.1	6.4	0.1
9	7.9	5.6	4.6	3.6	1.9	0.3	4.6	0.1	6.2	0.1	3.1	0.1
10	9.3	5.3	4.8	2.7	2.0	0.3	5.8	0.1	2.4	0.1	2.3	0.1
11	10.5	5.8	3.6	1.7	1.7	0.3	2.6	0.0	4.7	0.1	1.3	0.2
12	9.6	5.4	2.9	1.3	1.8	0.5	2.3	0.8	5.3	0.1	0.8	0.1
13	5.9	3.0	3.4	2.0	2.9	0.5	1.2	0.1	4.8	0.1	0.8	0.2
14	7.3	2.7	4.2	3.0	2.5	0.8	0.7	0.1	5.8	0.1	1.0	0.2
15	7.5	5.6	3.2	2.4	1.6	0.1	0.8	0.0	5.9	0.1	1.0	0.1
16	7.5	4.9	3.4	2.2	2.0	0.1	1.1	0.2	5.2	4.2	0.2	0.1
17	6.3	4.2	2.6	2.0	1.4	0.1	1.4	0.0	6.0	0.3	0.2	0.1
18	8.9	4.4	2.6	1.7	4.4	0.2	1.4	0.0	5.4	0.1	0.5	0.1
19	8.3	4.8	2.6	1.3	5.1	0.2	1.6	0.0	6.6	0.1	0.4	0.1
20	6.8	3.3	3.2	1.4	6.1	0.5	1.7	0.0	4.5	0.1	0.2	0.1
21	5.2	2.1	3.6	0.8	4.3	0.4	1.8	0.0	4.9	0.1	0.7	0.1
22	5.1	2.5	5.3	1.1	4.3	0.3	3.3	0.0	7.3	0.1	2.9	0.7
23	5.4	2.7	5.3	1.9	4.5	0.1	4.3	0.3	6.9	0.1	2.3	0.3
24	5.7	1.5	3.9	1.4	2.3	0.4	2.4	0.3	5.7	0.1	1.3	0.3
25	6.6	3.0	3.4	0.6	2.0	0.2	---	---	1.7	0.1	2.4	0.2
26	5.9	3.9	2.8	0.7	1.5	0.2	2.4	0.3	0.8	0.2	1.7	0.2
27	7.1	3.1	3.3	1.7	4.0	0.4	3.2	0.3	1.6	0.2	0.6	0.2
28	5.4	2.7	3.2	2.1	3.2	0.5	3.3	0.3	0.8	0.1	0.7	0.2
29	5.0	1.5	2.9	1.9	1.3	0.4	2.9	0.3	2.6	0.2	0.6	0.2
30	6.4	2.1	2.8	1.5	2.9	0.3	0.9	0.2	3.4	0.1	0.7	0.2
31	---	---	3.4	1.2	---	---	2.2	0.2	4.5	0.1	---	---
MONTH	10.5	1.5	7.1	0.6	6.1	0.0	7.8	0.0	7.3	0.1	9.6	0.1
YEAR	10.9	0.0										

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	15.5	16.0	10.5	8.5	7.5	4.5	3.5	---	---	6.0	4.5
2	18.5	16.0	15.0	14.0	10.5	8.5	5.5	4.5	---	---	6.5	5.0
3	18.0	16.5	14.0	11.5	9.5	9.0	5.5	4.0	4.0	3.0	5.5	3.0
4	17.0	14.5	11.5	10.5	9.5	7.5	6.5	5.0	3.5	2.0	4.5	2.5
5	17.5	14.0	10.5	9.5	7.5	5.0	5.5	2.5	---	---	5.0	2.5
6	19.0	15.5	10.5	9.5	5.0	4.0	3.0	1.5	---	---	5.5	4.5
7	19.0	16.5	12.0	10.0	4.5	3.5	2.5	1.0	---	---	5.0	2.5
8	19.5	17.5	12.0	10.5	6.0	4.0	3.0	1.5	---	---	2.5	2.0
9	20.0	15.5	13.0	10.5	6.5	6.0	3.5	2.0	---	---	4.5	1.5
10	19.5	17.5	13.5	12.0	7.5	6.5	5.0	3.0	---	---	4.5	3.5
11	17.5	16.5	13.5	12.5	8.0	5.0	6.0	4.0	---	---	5.5	4.5
12	18.5	17.0	13.5	13.0	8.0	5.5	5.5	4.5	5.0	4.0	5.5	4.5
13	19.5	18.0	13.0	12.5	5.5	4.0	4.5	3.5	4.0	3.0	5.0	4.0
14	18.5	17.5	12.5	10.5	4.0	3.0	5.0	4.5	3.5	1.0	6.5	4.0
15	18.0	16.5	10.5	9.0	3.5	3.0	4.5	3.5	4.0	2.0	8.5	6.5
16	16.0	13.5	9.0	8.5	3.5	3.0	3.5	3.0	5.5	3.5	8.5	5.5
17	14.5	12.0	8.5	8.5	4.5	3.5	4.0	2.0	5.5	4.0	5.5	4.5
18	14.5	12.0	---	---	5.0	4.0	3.0	1.5	4.0	3.0	5.5	4.0
19	15.0	12.0	---	---	5.5	4.5	3.0	1.0	3.0	2.0	6.0	5.0
20	14.0	13.0	9.5	8.5	5.5	5.0	3.5	2.0	2.5	1.5	5.0	4.0
21	14.5	14.0	9.0	8.0	5.0	4.5	4.0	2.5	1.5	1.5	6.0	3.0
22	15.5	14.5	8.0	7.0	5.0	4.5	5.5	3.0	2.5	1.5	6.0	5.0
23	16.0	14.0	7.0	4.0	5.5	4.5	5.5	4.0	2.5	1.5	5.5	4.0
24	15.5	13.5	4.0	2.0	4.5	3.0	5.5	4.0	1.5	1.0	5.5	3.5
25	15.5	13.5	3.0	2.0	3.0	2.0	6.0	5.0	3.5	1.5	6.0	3.5
26	16.0	14.0	4.5	3.0	2.5	1.5	6.0	2.0	5.0	3.5	7.5	4.5
27	16.0	13.5	7.0	4.5	2.5	1.5	2.0	0.5	6.5	5.0	6.5	5.5
28	15.0	13.5	8.5	7.0	3.0	2.0	2.0	0.5	5.5	4.5	---	---
29	14.5	14.0	8.5	8.0	3.5	2.0	2.5	0.5	---	---	10.0	8.5
30	14.5	14.0	8.5	7.5	4.0	2.5	2.5	0.5	---	---	9.5	7.5
31	15.5	14.5	---	---	4.0	2.5	0.5	0.5	---	---	11.0	6.5
MONTH	20.0	12.0	16.0	2.0	10.5	1.5	6.5	0.5	---	---	11.0	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	8.5	14.0	10.5	22.5	18.5	26.5	24.5	24.5	20.0	24.5	21.5
2	11.0	9.0	12.5	11.0	22.5	20.0	26.0	22.5	25.0	21.5	24.5	22.5
3	9.0	8.5	14.5	11.0	24.0	20.5	26.5	21.5	24.0	22.5	24.0	22.0
4	9.5	8.0	16.5	10.5	24.0	20.5	26.0	21.0	23.0	21.0	24.0	22.5
5	10.5	7.0	15.0	13.0	25.0	22.0	25.5	22.0	24.0	19.5	25.5	22.0
6	10.0	7.5	14.5	13.0	26.0	22.0	26.0	22.5	24.5	20.0	26.5	23.0
7	12.0	7.0	16.0	13.0	25.0	22.5	27.5	22.0	25.5	20.0	25.0	23.0
8	13.5	8.5	17.0	14.5	23.5	20.0	26.5	22.5	26.0	21.0	27.0	23.0
9	13.5	10.5	17.5	14.0	22.5	18.5	27.0	23.5	26.0	21.5	26.5	23.0
10	15.0	10.5	20.0	14.5	24.0	19.5	26.0	23.0	24.5	23.5	26.0	22.0
11	15.5	10.0	19.0	16.0	23.5	21.0	24.5	21.0	25.5	22.0	24.5	23.0
12	17.0	11.5	17.5	16.0	24.5	21.5	25.0	21.0	25.5	20.5	23.5	21.5
13	16.5	13.0	15.5	14.0	25.5	22.5	24.5	21.0	25.0	20.5	21.0	19.0
14	15.0	11.5	19.0	13.0	25.5	22.0	25.5	21.5	25.0	20.5	22.0	19.0
15	14.0	12.0	20.0	14.5	24.5	20.5	25.5	20.5	24.5	22.5	22.5	19.5
16	16.5	11.0	21.0	16.5	25.0	19.5	25.5	20.5	25.5	21.0	20.5	19.0
17	14.5	12.5	22.0	16.5	24.0	20.5	25.0	22.0	25.5	20.0	20.0	18.5
18	18.0	13.0	23.5	18.0	25.5	24.0	25.0	20.5	25.0	21.0	20.5	18.5
19	18.5	13.5	24.0	20.0	27.0	22.0	24.5	21.5	25.0	21.5	20.5	19.0
20	19.0	14.0	23.5	20.5	28.0	22.5	24.5	20.5	24.5	22.0	20.5	19.0
21	16.0	13.0	22.0	19.0	26.5	24.5	25.0	21.0	25.5	23.0	21.0	19.5
22	13.0	11.5	21.5	17.0	26.0	22.5	26.0	21.0	25.5	22.0	20.5	17.5
23	15.0	10.0	21.5	16.0	26.5	21.5	25.5	22.0	24.5	21.5	20.0	18.0
24	13.0	11.0	20.5	17.5	26.5	21.5	24.5	22.5	23.5	19.0	20.0	17.0
25	13.5	11.0	20.0	17.5	26.5	22.0	---	---	22.0	20.5	18.5	15.5
26	12.5	10.5	17.5	16.0	25.5	23.5	25.5	24.0	22.0	20.5	18.5	16.5
27	13.0	9.5	16.0	14.5	28.0	22.5	25.0	21.5	22.5	19.5	19.5	17.5
28	15.5	11.5	17.0	13.5	28.5	24.0	24.5	21.0	22.0	19.5	22.5	18.5
29	12.5	11.5	18.5	15.0	27.5	22.0	24.5	21.5	23.5	19.0	23.5	20.5
30	13.5	11.0	21.0	15.5	28.0	24.5	23.0	21.0	24.5	20.0	23.5	21.0
31	---	---	22.0	17.0	---	---	24.0	20.5	24.5	21.5	---	---
MONTH	19.0	7.0	24.0	10.5	28.5	18.5	27.5	20.5	26.0	19.0	27.0	15.5
YEAR	28.5	0.5										

03131500 BLACK FORK AT LOUDONVILLE, OHIO

LOCATION.--Lat 40°38'09", long 82°14'22", in NW 1/4 sec.1, T.19 N., R.16 W., Ashland County, just downstream from the gaging station, at Loudonville water treatment plant, 1.5 miles downstream from Big Run.

DRAINAGE AREA.--349 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1958, April 1968 to September 1971.
Water temperatures: April 1968 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 978 micromhos Jan. 14; minimum, 185 micromhos Sept. 21.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.							
15...	1645	--	--	--	--	--	--
15...	1710	303	172	0	73	29	.3
30...	1600	136	178	0	100	36	.2
NOV.							
17...	1525	330	198	0	91	26	.2
28...	1500	177	242	0	83	46	.2
DEC.							
01...	1300	354	175	6	82	31	.3
19...	1800	892	130	0	68	19	.3
JAN.							
05...	1430	441	156	0	72	38	.3
18...	0800	244	202	0	85	30	.2
FEB.							
18...	1410	441	120	0	53	76	.3
26...	1300	1380	88	0	40	30	.3
MAR.							
03...	1050	1320	90	0	44	21	.4
11...	1720	647	134	0	60	48	.2
APR.							
07...	1400	236	173	0	71	30	.3
16...	1500	196	186	0	76	32	.2
MAY							
05...	1515	150	202	0	78	34	.3
17...	1600	353	179	0	67	25	.2
JUNE							
01...	0700	226	187	0	71	24	.2
03...	1645	--	--	--	--	--	--
23...	1100	114	218	0	65	28	.2
JULY							
07...	1000	94	227	0	62	27	.2
22...	1603	100	223	0	73	34	.3
AUG.							
09...	1605	81	250	0	89	31	.3
11...	1600	177	163	0	68	32	.3
SEP.							
02...	1635	79	238	12	73	35	.3
22...	1350	106	178	6	64	32	.3

03131500 BLACK FORK AT LOUDONVILLE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1970-71): Maximum, 978 micromhos Jan. 14, 1971; minimum, 185 micromhos Sept. 21, 1971.

REMARKS.--Continuous water-quality recorder operated since April 1968. Minimum recorded specific conductance value of 140 micromhos occurred Aug. 3, 1970. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice a year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
15...	--	--	--	--	--	10	5.8
15...	5.9	310	210	69	511	--	--
30...	7.7	384	250	100	612	--	--
NOV.							
17...	8.4	342	250	88	564	--	--
28...	.3	402	270	71	634	--	--
DEC.							
01...	11	340	240	86	558	--	--
19...	14	274	180	74	425	--	--
JAN.							
05...	12	324	210	82	524	--	--
18...	14	364	260	94	584	--	--
FEB.							
18...	12	328	160	62	561	--	--
26...	10	212	120	48	346	--	--
MAR.							
03...	13	200	130	56	330	--	--
11...	11	302	180	70	503	--	--
APR.							
07...	8.4	302	220	78	516	--	--
16...	7.3	314	230	78	544	--	--
MAY							
05...	7.0	350	240	74	569	--	--
17...	8.4	308	220	74	500	--	--
JUNE							
01...	6.0	320	240	87	509	--	--
03...	--	--	--	--	--	10	1.0
23...	7.3	350	240	62	553	--	--
JULY							
07...	7.4	352	260	74	551	--	--
22...	9.2	364	240	58	589	--	--
AUG.							
09...	6.1	378	240	35	636	--	--
11...	7.7	300	190	56	508	--	--
SEP.							
02...	10	402	220	5	657	--	--
22...	8.7	328	220	64	530	--	--

03131500 BLACK FORK AT LOUDONVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	552	519	591	501	---	---	570	465	---	---	323	305
2	570	546	540	408	---	---	582	516	---	---	338	305
3	639	552	525	432	---	---	585	525	---	---	341	281
4	597	579	534	438	---	---	777	486	---	---	380	311
5	594	585	552	441	---	---	543	477	---	---	425	326
6	585	576	558	441	---	---	576	501	---	---	434	401
7	603	576	573	435	---	---	588	453	---	---	563	419
8	621	585	558	462	---	---	606	537	---	---	428	395
9	609	576	549	429	549	543	573	516	---	---	452	392
10	639	585	543	432	555	543	576	501	---	---	539	443
11	618	588	564	471	588	543	561	480	---	---	512	428
12	606	528	597	492	576	384	570	501	---	---	534	471
13	549	423	---	---	477	411	645	474	---	---	852	444
14	579	471	---	---	519	477	978	540	---	---	459	423
15	576	513	624	465	498	462	699	555	---	---	465	432
16	528	516	546	468	486	456	591	546	---	---	444	429
17	534	519	561	456	609	480	612	552	---	---	432	411
18	537	528	558	459	486	438	---	---	569	524	429	414
19	546	528	561	468	444	432	---	---	740	374	462	429
20	630	540	567	528	477	438	---	---	416	335	474	450
21	627	531	---	---	498	450	---	---	473	416	555	471
22	567	537	---	---	828	462	---	---	467	257	564	459
23	567	549	573	435	741	459	---	---	344	299	471	456
24	564	543	570	480	522	465	---	---	332	302	561	468
25	561	543	588	513	522	471	---	---	332	302	492	480
26	573	546	---	---	516	477	---	---	443	323	507	483
27	594	564	---	---	552	471	---	---	341	317	501	486
28	600	561	---	---	558	462	---	---	323	293	501	455
29	606	558	---	---	588	480	---	---	---	---	501	452
30	894	570	---	---	564	486	---	---	---	---	531	495
31	591	567	---	---	570	498	---	---	---	---	531	516
MONTH	894	423	---	---	---	---	---	---	---	---	852	281

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	531	510	588	495	762	450	799	481	---	---	581	551
2	663	504	576	564	672	447	499	334	---	---	660	551
3	579	534	576	561	554	523	574	481	---	---	631	598
4	546	525	576	561	535	499	577	553	599	539	632	584
5	525	510	582	561	538	499	595	568	605	578	612	582
6	522	510	561	246	517	253	571	529	608	569	616	552
7	534	516	435	252	475	337	582	547	602	557	613	571
8	567	534	450	350	490	229	588	567	632	509	593	554
9	570	543	456	450	523	475	606	543	632	401	603	570
10	555	534	477	414	550	487	606	546	629	464	622	577
11	546	534	477	471	556	514	579	399	797	443	635	590
12	537	492	474	387	583	496	---	---	584	473	630	582
13	534	522	465	438	595	496	---	---	584	509	625	559
14	600	522	501	459	535	502	---	---	602	551	629	326
15	558	540	486	474	505	439	---	---	608	494	552	504
16	561	534	---	---	487	262	---	---	617	548	624	552
17	549	528	501	486	571	319	---	---	599	560	625	580
18	564	534	519	452	580	505	---	---	602	563	614	584
19	543	522	531	504	585	538	630	594	692	602	627	573
20	543	525	558	504	583	553	645	609	638	596	607	292
21	555	537	525	486	586	517	---	---	665	584	509	185
22	570	483	513	489	535	469	---	---	872	515	563	368
23	558	450	528	504	601	490	684	621	515	458	644	563
24	597	447	519	483	601	556	---	---	545	428	618	588
25	576	309	585	426	589	556	---	---	599	542	613	586
26	555	465	510	441	574	514	---	---	629	542	625	571
27	549	465	513	507	550	358	---	---	611	599	626	593
28	546	432	522	486	544	310	---	---	617	470	599	557
29	564	432	507	372	535	433	---	---	584	521	627	588
30	555	471	477	240	583	451	---	---	608	563	684	579
31	---	---	549	285	---	---	---	---	575	551	---	---
MONTH	663	309	588	240	762	229	---	---	872	401	684	185
YEAR	978	185										

03131500 BLACK FORK AT LOUDONVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.4	8.0	8.2	7.9	---	---	---	---	---	---	8.8	8.2
2	8.1	7.9	8.3	6.5	---	---	---	---	---	---	8.3	7.4
3	8.0	7.8	8.4	8.1	---	---	---	---	---	---	7.5	6.4
4	8.1	7.9	8.5	8.3	---	---	---	---	---	---	9.4	6.1
5	8.1	7.9	8.5	8.3	---	---	7.8	7.5	---	---	8.8	8.2
6	8.1	7.8	8.6	8.4	---	---	7.9	7.3	---	---	8.7	8.2
7	8.1	7.8	8.7	8.4	---	---	7.7	7.5	---	---	8.6	8.2
8	8.0	7.8	8.7	8.4	---	---	7.7	7.6	---	---	8.4	8.3
9	8.0	7.7	8.8	8.5	---	---	7.7	7.6	---	---	8.5	7.7
10	7.9	7.7	8.7	8.5	---	---	7.6	7.5	---	---	7.8	7.5
11	8.0	7.8	8.6	8.3	---	---	7.6	7.4	---	---	8.7	7.7
12	8.1	7.5	8.4	8.2	---	---	7.5	7.4	---	---	8.7	8.4
13	7.8	7.5	---	---	---	---	7.6	7.4	---	---	8.8	8.4
14	7.9	7.8	---	---	---	---	7.6	7.3	---	---	9.3	8.4
15	8.0	7.8	8.4	8.1	---	---	7.6	7.3	---	---	10.9	8.6
16	8.3	8.1	8.3	8.1	---	---	7.5	7.5	---	---	8.7	8.6
17	8.4	8.1	8.8	8.4	---	---	7.6	7.3	---	---	8.7	8.6
18	8.4	8.1	8.8	8.6	---	---	---	---	7.6	7.2	9.2	8.6
19	8.4	8.1	8.8	8.5	---	---	---	---	8.8	7.6	9.4	8.8
20	8.2	7.8	8.7	8.3	---	---	---	---	9.1	8.2	9.5	9.3
21	7.9	7.8	8.4	8.2	---	---	---	---	8.3	7.9	10.0	9.3
22	8.2	8.0	8.4	8.1	---	---	---	---	9.8	8.0	10.0	9.9
23	8.3	8.1	8.8	8.5	---	---	---	---	9.0	8.8	---	---
24	8.3	8.2	8.8	8.6	---	---	---	---	9.1	8.6	---	---
25	8.4	8.2	8.8	8.6	---	---	---	---	9.0	8.5	---	---
26	8.4	8.1	---	---	---	---	---	---	9.3	8.2	---	---
27	8.4	8.2	---	---	---	---	---	---	8.4	7.9	---	---
28	8.3	7.9	---	---	---	---	---	---	8.6	8.4	---	---
29	8.0	7.9	---	---	---	---	---	---	---	---	---	---
30	8.0	7.9	---	---	---	---	---	---	---	---	---	---
31	8.3	8.0	---	---	---	---	---	---	---	---	---	---
MONTH	8.4	7.5	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.9	8.4	8.0	7.6	5.3	4.7	---	---	7.4	7.1
2	---	---	8.6	8.2	8.0	7.7	7.0	4.8	---	---	8.1	7.4
3	---	---	8.3	8.1	8.2	7.7	7.2	6.8	---	---	7.7	7.5
4	6.8	6.0	8.2	7.7	7.9	7.5	7.3	7.0	8.1	8.0	7.7	7.3
5	7.8	5.4	8.2	7.7	7.6	7.3	7.2	7.1	8.1	7.9	8.0	7.3
6	8.0	6.4	9.3	7.6	7.4	7.2	7.2	7.1	8.3	7.9	8.0	7.4
7	8.9	6.6	8.3	7.5	7.3	7.1	7.3	7.1	8.3	8.0	7.8	7.5
8	8.9	8.1	8.4	8.2	7.3	7.1	7.3	7.1	8.3	8.0	7.9	7.2
9	8.0	7.6	8.4	7.7	7.1	7.0	7.2	7.1	8.4	7.9	7.9	7.3
10	7.8	7.5	7.9	6.4	7.3	7.0	7.2	7.0	8.2	7.6	8.1	7.5
11	7.9	7.5	8.1	7.9	7.4	7.2	7.5	7.1	7.7	7.4	7.8	7.6
12	8.0	7.5	8.1	7.8	7.4	7.2	7.4	6.9	7.8	7.4	7.8	7.5
13	7.9	7.6	7.9	7.7	7.9	7.5	7.4	7.0	8.1	7.6	7.7	7.5
14	7.9	7.3	8.0	7.5	8.1	7.7	7.2	7.0	7.9	7.6	7.5	7.2
15	8.0	7.5	8.1	7.5	8.1	6.8	7.3	7.1	7.7	7.5	7.5	7.3
16	8.2	7.5	---	---	7.0	6.7	7.4	7.2	8.0	7.5	7.5	7.4
17	8.1	7.6	7.4	6.6	7.0	6.4	7.3	7.2	8.0	7.6	7.5	7.4
18	8.2	7.5	7.2	6.6	7.0	6.1	7.4	7.1	8.0	7.5	7.6	7.5
19	8.3	7.8	6.8	6.5	6.7	6.2	7.5	7.4	7.8	7.4	7.6	7.5
20	8.6	7.8	7.0	6.6	6.8	6.1	7.5	7.2	7.7	7.3	7.6	7.5
21	8.6	7.5	---	---	6.8	6.4	7.2	7.0	7.5	7.3	7.6	7.4
22	7.9	7.3	---	---	6.9	6.1	7.7	7.0	7.3	7.0	7.7	7.5
23	8.0	7.5	---	---	6.9	6.1	7.9	7.3	7.6	7.1	7.6	7.4
24	8.0	7.5	7.0	6.0	6.5	5.9	---	---	7.9	7.3	7.6	7.5
25	8.0	7.5	8.6	7.0	6.3	6.0	---	---	7.5	7.2	7.7	7.5
26	8.1	7.4	9.3	8.7	6.4	6.2	---	---	7.5	7.1	7.6	7.5
27	8.4	8.0	9.0	8.3	6.5	5.2	---	---	7.3	6.9	7.5	6.5
28	8.6	8.3	8.7	8.2	5.8	5.1	---	---	7.2	7.0	7.3	5.8
29	8.5	8.3	8.7	8.1	6.1	5.6	---	---	7.2	7.0	7.2	5.2
30	8.6	8.4	8.6	7.7	6.0	4.7	---	---	7.3	7.0	7.4	6.2
31	---	---	8.1	7.6	---	---	---	---	7.3	7.1	---	---
MONTH	8.9	5.4	9.3	6.0	8.2	4.7	---	---	8.4	6.9	8.1	5.2

03131500 BLACK FORK AT LOUDONVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.3	7.4	7.6	6.0	---	---	---	---	---	---	8.7	7.7
2	8.6	6.8	---	---	---	---	---	---	---	---	8.0	7.4
3	7.5	6.5	---	---	---	---	---	---	---	---	8.3	7.3
4	8.1	7.0	---	---	---	---	---	---	---	---	8.2	7.2
5	8.5	6.9	---	---	---	---	11.4	10.6	---	---	8.2	7.3
6	8.1	6.9	---	---	---	---	11.4	10.6	---	---	---	---
7	8.4	6.9	---	---	---	---	11.9	10.7	---	---	---	---
8	8.4	6.4	---	---	---	---	12.5	10.9	---	---	---	---
9	8.5	6.6	---	---	---	---	11.7	10.7	---	---	---	---
10	8.0	6.9	---	---	---	---	11.7	10.8	---	---	---	---
11	8.7	7.0	---	---	---	---	11.4	10.8	---	---	10.9	10.3
12	8.4	2.7	---	---	---	---	11.2	8.6	---	---	11.8	10.5
13	7.0	1.9	---	---	---	---	11.2	10.0	---	---	11.9	10.1
14	7.9	6.6	---	---	---	---	10.7	9.8	---	---	11.2	10.3
15	9.0	6.9	---	---	---	---	11.6	10.7	---	---	10.7	9.7
16	9.8	8.8	---	---	---	---	11.8	11.1	---	---	10.5	10.1
17	10.3	8.9	---	---	---	---	11.2	10.5	---	---	10.7	10.1
18	10.3	9.0	---	---	---	---	---	---	10.8	10.2	10.8	9.9
19	10.4	8.7	---	---	---	---	---	---	10.6	10.1	10.3	9.7
20	9.5	7.7	---	---	---	---	---	---	10.5	9.9	10.5	9.7
21	8.3	7.0	---	---	---	---	---	---	9.9	9.7	11.1	9.9
22	9.3	8.1	---	---	---	---	---	---	10.6	8.7	11.2	9.6
23	9.4	7.7	---	---	---	---	---	---	9.7	7.9	10.8	10.2
24	7.8	7.0	---	---	---	---	---	---	8.9	8.2	11.6	10.2
25	7.8	6.8	---	---	---	---	---	---	9.3	8.5	12.3	10.4
26	7.7	5.8	---	---	---	---	---	---	9.2	7.4	11.7	10.5
27	7.5	5.8	---	---	---	---	---	---	7.9	7.3	12.5	10.4
28	7.2	5.5	---	---	---	---	---	---	8.6	7.2	11.9	10.9
29	6.3	5.3	---	---	---	---	---	---	---	---	11.0	10.0
30	7.2	5.2	---	---	---	---	---	---	---	---	12.0	10.4
31	8.2	6.1	---	---	---	---	---	---	---	---	11.6	9.6
MONTH	10.4	1.9	---	---	---	---	---	---	---	---	12.5	7.2

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	9.9	13.1	7.6	9.1	5.4	3.8	1.9	6.3	4.8	6.5	4.8
2	10.7	9.4	11.8	8.8	7.5	4.8	4.5	2.3	6.6	5.3	7.7	4.9
3	11.8	9.6	13.3	9.1	7.9	4.7	4.9	2.6	6.9	5.5	5.2	4.2
4	11.6	9.5	13.8	8.4	8.1	5.5	5.1	3.1	6.4	5.2	7.1	5.2
5	13.2	9.3	10.4	7.4	7.2	5.4	5.1	3.3	7.8	4.1	8.7	5.0
6	12.7	10.4	8.1	6.7	6.3	4.7	5.5	3.5	9.2	4.0	8.3	5.0
7	11.8	9.0	8.4	6.9	6.0	4.3	7.5	3.9	7.4	4.4	7.0	4.6
8	10.1	7.4	8.4	6.9	6.6	4.7	6.4	4.2	6.9	4.7	9.1	4.4
9	9.1	7.2	8.5	6.7	5.5	4.2	5.3	3.7	9.0	4.7	10.7	4.6
10	9.6	6.7	10.2	8.5	6.6	4.5	4.3	3.0	4.8	4.0	11.7	5.8
11	10.3	6.6	8.5	6.6	6.6	4.6	4.0	2.4	---	---	7.3	4.1
12	11.9	6.4	8.1	5.8	6.5	4.3	4.4	2.6	5.2	4.1	10.6	5.5
13	10.5	6.7	8.1	6.5	7.4	4.0	4.9	3.6	6.5	4.2	5.7	4.1
14	11.5	6.4	8.0	6.3	8.1	4.4	5.2	2.8	5.6	4.3	4.4	4.0
15	12.4	7.1	7.1	6.0	6.2	4.2	5.7	3.3	4.4	4.3	8.1	4.0
16	13.5	7.3	---	---	7.4	4.5	5.8	3.3	7.7	4.8	7.7	4.1
17	11.6	7.1	8.0	7.1	7.0	4.4	4.9	3.2	9.1	5.1	7.1	4.0
18	12.8	7.1	8.1	6.8	6.8	4.3	5.8	3.7	9.3	4.1	7.5	4.2
19	13.9	6.8	8.6	6.8	6.2	4.1	5.6	4.0	9.2	4.5	6.6	4.4
20	13.7	6.5	8.4	6.7	6.3	4.0	5.4	4.3	9.2	4.1	5.0	4.1
21	9.5	6.1	8.6	6.3	6.1	3.5	5.8	4.0	7.0	4.3	5.4	4.3
22	11.1	6.5	9.8	7.2	6.2	4.3	6.0	3.5	---	---	6.6	4.1
23	12.0	7.2	9.0	6.4	6.5	4.2	5.3	3.3	7.1	4.4	6.3	5.0
24	11.7	6.5	8.4	5.7	6.2	3.9	4.1	2.0	9.5	4.5	6.2	4.8
25	11.9	6.8	6.2	4.5	5.6	3.4	4.5	1.7	5.2	4.2	6.3	4.9
26	10.0	7.5	6.3	4.9	4.4	3.0	5.4	3.3	7.4	4.8	5.4	4.1
27	10.5	9.0	7.6	5.2	5.1	3.1	5.5	4.2	---	---	4.3	3.5
28	10.7	9.1	8.1	6.4	5.5	3.1	6.3	3.9	---	---	4.8	3.3
29	10.5	9.7	8.0	5.7	5.2	2.8	6.8	4.2	4.5	4.4	4.5	3.0
30	10.7	9.3	7.8	5.6	5.0	2.4	4.9	4.0	5.8	4.3	4.8	3.2
31	---	---	8.3	5.4	---	---	5.4	4.4	6.3	4.0	---	---
MONTH	13.9	6.1	13.8	4.5	9.1	2.4	7.5	1.7	9.5	4.0	11.7	3.0

03131500 BLACK FORD AT LOUDONVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	13.5	12.5	11.0	---	---	3.0	2.5	---	---	4.0	3.0
2	15.5	13.0	12.5	11.0	---	---	3.5	3.0	---	---	4.5	3.0
3	14.5	12.0	11.5	10.0	---	---	3.5	2.5	---	---	3.5	3.0
4	13.5	11.5	10.5	9.5	---	---	5.5	3.5	---	---	3.5	2.5
5	13.5	11.5	10.5	9.5	---	---	4.5	2.0	---	---	4.5	2.5
6	15.5	13.5	10.5	9.0	---	---	2.0	1.5	---	---	4.5	3.5
7	15.0	13.5	11.0	9.0	---	---	2.0	1.0	---	---	4.5	3.0
8	16.0	14.0	11.5	10.0	---	---	2.0	1.0	---	---	3.0	2.5
9	17.0	15.0	12.5	11.0	4.5	4.0	3.0	1.5	---	---	4.0	2.0
10	15.5	13.0	12.0	10.5	4.0	3.5	4.0	2.5	---	---	4.0	3.5
11	14.0	13.0	12.5	12.0	5.0	4.0	4.5	3.5	---	---	4.0	2.5
12	17.0	14.5	12.5	11.5	6.5	5.0	4.5	4.0	---	---	4.0	2.5
13	17.5	16.5	---	---	5.0	4.0	4.0	3.5	---	---	5.0	3.5
14	17.0	16.0	---	---	4.0	3.5	5.5	4.0	---	---	7.0	3.0
15	15.5	12.0	14.0	9.5	3.5	2.5	4.5	3.5	---	---	7.5	6.5
16	12.5	10.0	16.0	9.0	7.0	2.5	4.0	3.5	---	---	6.0	5.0
17	12.0	10.0	12.0	7.5	4.0	3.5	4.5	3.0	---	---	5.5	4.5
18	12.0	10.0	8.5	7.0	3.5	2.5	---	---	3.0	2.5	5.0	4.0
19	12.0	10.5	11.0	8.0	4.0	2.5	---	---	3.5	2.5	5.0	4.0
20	12.0	10.0	10.5	9.0	3.5	3.0	---	---	3.0	2.5	4.0	3.5
21	13.0	12.0	---	---	3.5	3.0	---	---	2.5	2.0	5.0	2.5
22	13.5	11.5	---	---	4.0	3.0	---	---	2.5	1.0	4.5	4.0
23	13.0	12.0	8.5	5.0	5.0	4.0	---	---	3.0	1.5	4.5	3.0
24	13.0	11.5	9.0	5.5	4.0	2.0	---	---	1.5	1.0	4.5	2.5
25	13.0	11.5	10.0	6.0	2.0	1.5	---	---	2.5	1.0	4.5	2.5
26	13.5	12.0	---	---	2.0	1.5	---	---	3.5	2.0	6.0	3.5
27	13.5	12.0	---	---	2.5	1.5	---	---	4.0	3.0	6.5	4.0
28	13.0	12.0	---	---	2.5	1.5	---	---	4.0	2.5	8.0	5.5
29	12.5	12.5	---	---	3.0	2.0	---	---	---	---	7.5	6.0
30	14.0	12.5	---	---	2.5	1.5	---	---	---	---	8.0	5.0
31	14.0	11.0	---	---	3.0	2.5	---	---	---	---	9.0	5.5
MONTH	17.5	10.0	---	---	---	---	---	---	---	---	9.0	2.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.0	12.0	9.0	21.0	17.0	24.5	23.0	---	---	---	---
2	9.0	7.5	11.5	10.0	20.5	18.5	23.0	21.5	---	---	20.5	20.0
3	8.0	6.5	12.5	9.5	22.0	19.0	22.5	19.5	---	---	20.0	19.5
4	7.5	6.0	14.0	9.5	23.5	19.5	22.5	19.0	---	---	21.0	19.0
5	8.0	6.0	13.0	11.5	25.0	21.5	22.0	20.5	---	---	22.0	19.5
6	9.0	6.0	17.0	11.5	24.5	22.0	22.5	20.0	---	---	21.5	20.0
7	10.0	6.5	14.5	11.5	24.5	21.5	24.0	20.0	---	---	21.5	19.5
8	12.0	7.5	14.5	12.5	23.5	20.5	23.5	21.0	---	---	21.5	19.0
9	13.0	9.5	14.0	13.5	20.5	18.5	24.5	22.0	---	---	21.5	19.5
10	12.5	9.0	17.5	14.0	21.5	17.0	24.0	22.5	---	---	21.0	18.5
11	13.0	8.5	16.5	14.0	21.0	18.5	23.5	21.0	---	---	20.5	19.0
12	14.5	9.5	15.5	14.0	22.0	19.5	23.5	21.0	---	---	19.5	18.0
13	14.0	11.5	14.5	13.0	23.0	20.5	23.0	20.5	---	---	18.5	17.0
14	13.0	10.0	17.0	13.0	23.0	21.0	22.0	19.0	---	---	19.0	17.5
15	12.0	9.5	16.0	15.0	22.0	20.0	---	---	---	---	19.0	17.5
16	14.0	9.5	---	---	22.0	19.0	---	---	---	---	18.0	16.5
17	14.0	12.0	20.0	13.0	22.0	19.0	---	---	---	---	17.0	16.5
18	16.0	12.5	21.5	18.0	22.5	20.0	---	---	---	---	17.5	16.0
19	16.0	12.0	21.5	18.0	24.0	21.5	---	---	---	---	17.5	16.5
20	16.5	12.5	21.0	18.5	24.0	21.5	---	---	---	---	18.5	17.0
21	15.0	12.0	20.0	17.5	23.5	22.0	---	---	---	---	18.0	16.0
22	12.5	10.5	19.0	16.0	22.0	20.0	---	---	---	---	17.0	15.0
23	13.5	9.5	19.0	15.0	22.0	19.0	---	---	---	---	17.0	15.5
24	13.0	10.5	19.0	16.5	23.0	20.0	---	---	---	---	16.5	15.0
25	14.0	10.5	18.5	16.0	23.0	21.0	---	---	---	---	15.5	13.5
26	13.0	11.0	16.0	14.5	22.0	20.0	---	---	---	---	15.5	14.0
27	11.5	9.5	15.0	13.5	24.5	21.0	---	---	---	---	17.0	15.5
28	14.0	10.5	17.0	13.5	25.0	22.5	---	---	---	---	19.5	16.5
29	13.0	11.0	18.0	15.0	25.0	23.0	---	---	---	---	20.5	18.5
30	12.0	9.5	19.5	15.5	25.0	23.0	---	---	---	---	21.0	19.0
31	---	---	20.5	17.0	---	---	---	---	---	---	---	---
MONTH	16.5	6.0	21.5	9.0	25.0	17.0	---	---	---	---	22.0	13.5

03144500 MUSKINGUM RIVER AT DRESDEN, OHIO

LOCATION.--Lat 40°07'13", long 81°59'59", Muskingum County, at gaging station on left bank 70 ft downstream from bridge on State Highway 208, 0.5 mile east of Dresden, and 0.5 mile downstream from Wakatomika Creek.

DRAINAGE AREA.--5,993 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1966, 1969-71 (partial-record station).
Water temperatures: October 1952 to September 1961, October 1963 to September 1971.
Sediment records: October 1952 to September 1971.

EXTREMES.--1970-71:
Water temperatures: Maximum, 28.5°C July 1; minimum, freezing point on several days during January and February.
Sediment concentrations: Maximum daily, 918 mg/l May 6; minimum daily, 7 mg/l Feb. 3.
Sediment discharges: Maximum daily, 26,800 tons May 7; minimum daily, 23 tons Oct. 9.

Period of record:
Water temperatures (1952-60, 1964-71): Maximum, 31.0°C Aug. 4, 1955; minimum, freezing point on many days during 1952- 9, 1965, 1967-71.
Sediment concentrations: Maximum daily, 1,600 mg/l Jan. 22, 1959; minimum daily, 1 mg/l on several days during 1952, 1954, 1956, and 1960.
Sediment discharges: Maximum daily, 160,000 tons Jan. 22, 1959; minimum daily, 2.7 tons Dec. 17, 1960.

REMARKS.--Chemical analyses for this station on page 357. Flow is regulated by 15 flood control reservoirs at points 15 to 105 miles upstream.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
(ONCE-DAILY MEASUREMENT BETWEEN 0700 AND 1200)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.5	14.0	8.0	1.0	---	4.0	8.5	11.0	19.0	28.5	23.5	25.0
2	17.0	13.5	9.0	1.5	---	4.0	8.0	12.5	20.5	27.0	25.0	26.5
3	18.0	12.5	8.0	1.5	1.0	3.0	8.0	11.0	21.0	26.0	27.0	26.0
4	16.5	11.0	7.0	3.5	1.5	2.5	8.0	11.0	22.0	26.0	26.0	26.5
5	15.0	10.5	6.0	3.0	2.0	2.0	7.0	12.5	24.5	25.5	24.0	27.0
6	16.5	10.0	4.5	1.0	---	3.0	7.0	13.0	24.0	26.5	23.0	27.5
7	18.0	10.0	3.5	0.0	0.0	3.0	7.0	12.0	23.0	27.5	24.0	27.5
8	18.5	9.5	3.0	0.0	0.0	2.0	8.0	12.0	22.0	27.0	25.0	27.5
9	18.0	10.0	4.0	0.5	0.0	1.5	10.0	13.0	21.5	28.0	25.5	28.0
10	17.5	11.5	4.0	0.5	0.0	2.0	10.0	13.0	20.0	28.0	27.0	28.0
11	17.0	11.0	4.5	1.0	0.0	2.0	11.0	14.0	21.5	27.0	26.5	28.0
12	16.0	12.0	5.5	3.0	1.0	3.5	11.0	15.0	22.0	25.0	25.0	27.0
13	18.0	12.0	5.0	2.0	0.0	4.0	14.0	13.0	23.5	24.5	25.0	26.0
14	19.0	11.0	4.5	3.0	0.0	5.0	13.0	12.5	23.5	24.5	25.0	23.0
15	16.0	9.5	3.5	2.5	0.0	7.0	12.0	14.0	23.0	24.5	25.5	23.0
16	15.0	7.5	4.0	1.5	0.5	6.0	13.0	15.0	22.0	25.0	24.0	22.0
17	13.0	6.5	4.0	---	---	6.0	13.0	15.0	22.0	26.0	25.0	21.0
18	12.5	6.5	3.5	0.0	---	4.5	13.0	17.0	23.0	25.0	26.0	21.0
19	12.0	6.5	5.0	0.0	2.0	5.0	14.0	19.0	24.5	25.0	27.0	21.5
20	14.0	7.0	4.0	0.0	2.0	4.0	15.0	19.5	26.0	24.0	27.0	22.0
21	14.0	7.0	4.0	0.0	1.0	4.0	15.0	18.5	26.0	24.0	27.5	20.0
22	14.0	7.5	4.0	---	2.0	4.5	13.0	18.0	25.0	25.0	26.5	19.0
23	14.0	9.0	4.0	---	2.0	4.0	12.0	17.0	24.5	26.5	26.0	20.0
24	13.0	3.5	3.0	1.5	2.0	3.5	12.0	18.0	25.0	26.5	24.5	19.0
25	14.0	2.5	2.0	2.0	2.0	5.0	12.5	18.5	26.0	24.5	24.5	19.0
26	14.0	3.0	1.0	1.0	2.5	5.0	13.0	17.0	26.5	25.0	25.0	19.0
27	14.0	4.5	1.0	0.0	4.0	6.0	11.5	15.5	27.0	24.5	23.5	21.0
28	14.5	5.0	1.0	0.0	4.0	6.5	13.0	14.0	28.0	24.5	22.5	22.0
29	15.0	6.5	1.5	0.0	---	7.0	12.0	15.0	28.0	25.0	22.0	23.5
30	15.0	7.0	1.0	0.0	---	7.0	12.0	15.0	28.0	25.0	23.0	24.0
31	16.0	---	1.0	0.0	---	7.0	---	17.0	---	24.5	25.0	---
MONTH	15.5	8.5	4.0	1.0	1.5	4.5	11.0	15.0	24.0	25.5	25.0	23.5
YEAR	13.5											

03144500 MUSKINGUM RIVER AT DRESDEN, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1950	22	116	3780	74	755	7890	68	1450
2	1720	20	93	4930	100	1330	8770	118	2790
3	1520	22	90	7890	188	4000	8130	75	1650
4	1420	18	69	9300	201	5050	7630	58	1190
5	1350	18	66	9540	198	5100	9300	91	2290
6	1230	15	50	8940	132	3190	9650	102	2660
7	1160	14	44	7790	95	2000	8550	45	1040
8	1110	11	33	6590	79	1410	7190	26	505
9	1080	8	23	5530	60	896	6420	21	364
10	1100	9	27	4930	49	652	5850	19	300
11	1620	38	216	4660	45	566	5540	20	299
12	2330	84	528	4520	42	513	6740	76	1580
13	2300	28	174	4360	37	436	12900	256	8920
14	3080	40	333	4170	36	405	15500	214	8960
15	4440	120	1440	5260	52	739	15400	138	5740
16	3970	86	922	7730	90	1880	14500	98	3840
17	3540	55	526	9490	118	3020	13600	68	2500
18	2920	43	339	9080	80	1960	12800	52	1800
19	2510	28	190	7850	52	1100	12000	50	1620
20	2270	20	123	6990	47	887	11100	46	1380
21	2070	15	84	6610	39	696	9670	39	1020
22	2060	14	78	6480	42	735	9140	33	814
23	2120	12	69	6150	39	648	11800	58	1850
24	2230	15	90	5620	29	440	13700	66	2440
25	2230	15	90	5180	22	308	13200	51	1820
26	2100	16	91	4830	16	209	11300	38	1160
27	1930	14	73	4700	14	178	9320	29	730
28	1710	16	74	4640	15	188	8070	26	567
29	1640	15	66	4730	17	217	7210	21	409
30	1810	21	103	5490	28	415	6840	17	314
31	2560	38	263	--	--	--	6360	19	326
TOTAL	65080	--	6483	187760	--	39923	306070	--	62328

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6040	22	359	2100	8	45	25000	106	7160
2	5450	17	250	2090	9	51	25300	100	6830
3	4780	14	181	2260	7	43	24300	89	5840
4	6190	62	1240	2380	8	51	22600	82	5000
5	11600	146	4570	4390	105	1420	21000	68	3860
6	13600	118	4330	9330	282	7100	16200	143	6250
7	11700	74	2340	9980	273	7360	19000	250	12800
8	9080	42	1030	10400	191	5360	21800	182	10700
9	7550	29	591	9960	121	3250	20400	110	6060
10	6780	34	622	6990	82	1550	18200	65	3190
11	6190	22	368	5890	55	875	16500	55	2450
12	5670	17	260	5470	49	724	14600	51	2010
13	5260	22	312	5290	46	657	16000	108	4670
14	5080	19	260	5670	34	521	19800	178	9520
15	5440	20	294	5600	34	514	20600	102	5670
16	5890	25	398	5330	27	389	20500	91	5040
17	5440	24	353	4900	25	331	19700	89	4730
18	4710	17	216	6000	42	680	17900	68	3290
19	4390	19	225	9300	123	3240	16000	57	2460
20	4070	19	209	17300	398	18600	14600	53	2090
21	3830	12	124	21200	382	21900	14100	70	2660
22	3750	12	122	23800	371	23800	13400	57	2060
23	3730	13	131	23800	370	23800	12700	52	1780
24	3540	12	115	23800	246	15800	12000	46	1490
25	3490	14	132	25300	195	13300	10400	42	1180
26	3400	27	248	26000	157	11000	9470	42	1070
27	3100	22	189	25800	128	8920	8760	43	1020
28	2580	19	132	25500	121	8330	8470	41	938
29	2050	12	66	--	--	--	8190	42	929
30	2400	11	71	--	--	--	7510	35	710
31	2400	8	52	--	--	--	6880	33	613
TOTAL	169240	--	19790	325830	--	179611	501880	--	124870

03144500 MUSKINGUM RIVER AT DRESDEN, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6270	33	559	2210	12	72	2880	24	187
2	5960	32	515	2170	13	76	2640	21	150
3	6210	34	570	2230	12	72	2760	26	194
4	6140	26	431	2210	13	78	2780	24	180
5	5510	22	327	2200	10	59	2660	23	165
6	5040	23	313	8010	918	24800	2580	23	160
7	4780	23	297	18000	552	26800	3800	195	2210
8	4610	18	224	20500	280	15500	4920	250	3320
9	4360	23	271	22400	197	11900	4270	121	1400
10	4170	21	236	21700	144	8440	3600	58	564
11	3940	14	149	19600	114	6030	3200	49	423
12	3780	13	133	16200	120	5250	2760	43	320
13	3670	17	168	13800	110	4100	2540	45	309
14	3640	22	216	12700	89	3050	2550	53	365
15	3760	13	132	11000	97	2880	2510	48	325
16	3750	21	213	9820	80	2120	2450	44	291
17	3570	22	212	8790	85	2020	2280	38	234
18	3490	11	104	8290	86	1920	2090	37	209
19	3380	11	100	7410	72	1440	1930	33	172
20	3200	12	104	6120	49	810	1800	49	238
21	3000	12	97	5260	46	653	1690	25	114
22	2910	13	102	4700	40	508	1590	26	112
23	2820	9	69	4180	33	372	1540	39	162
24	2720	14	103	3760	28	284	1520	42	172
25	2580	8	56	3670	26	258	1430	27	104
26	2450	8	53	3920	26	275	1390	26	98
27	2350	10	63	4000	25	270	1350	39	142
28	2330	12	75	3860	23	240	1310	50	177
29	2310	14	87	3570	19	183	1520	45	185
30	2280	14	86	3330	19	171	1430	26	100
31	--	--	--	3100	22	184	--	--	--
TOTAL	114980	--	6065	258710	--	120815	71770	--	12782

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1630	30	132	1200	36	117	1030	50	139
2	1630	42	185	1160	18	56	977	27	71
3	1470	36	143	1120	22	67	966	28	73
4	1330	34	122	1100	39	116	955	34	88
5	1230	31	103	1140	48	148	933	42	106
6	1150	27	84	1150	53	165	911	33	81
7	1110	34	102	1130	64	195	999	40	108
8	1080	90	262	1110	64	192	999	52	140
9	1060	85	243	1080	46	134	977	53	140
10	1100	67	199	1040	44	124	966	24	63
11	1160	92	288	1120	50	151	933	25	63
12	2080	93	522	1190	53	170	890	18	43
13	3240	94	822	1160	50	157	911	34	84
14	2480	66	442	1090	45	132	1180	71	225
15	1860	61	306	1020	50	138	2090	98	553
16	1600	63	272	966	25	65	2300	75	466
17	1470	44	175	933	29	73	1980	54	289
18	1400	53	200	890	23	55	1630	56	246
19	1290	38	132	870	26	61	1510	72	294
20	1200	36	117	850	27	62	1460	65	256
21	1190	49	157	890	20	48	1430	43	166
22	1230	47	156	911	18	44	1640	39	173
23	1200	43	139	1010	19	52	1580	38	162
24	1210	49	160	1050	33	94	1410	45	171
25	1490	86	346	999	37	100	1250	44	149
26	1660	70	314	1100	45	134	1230	35	116
27	1630	72	317	1600	895	4010	1220	42	138
28	1510	59	241	1710	118	545	1220	54	178
29	1410	45	171	1730	110	514	1160	52	163
30	1330	36	129	1330	76	273	1120	46	139
31	1250	35	118	1120	56	169	--	--	--
TOTAL	45680	--	7099	34769	--	8361	37857	--	5084

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	2119626
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	592411

03144500 MUSKINGUM RIVER AT DRESDEN, OHIO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
						.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
FEB. 22,1971	1715	3.0	24500	513	33900	35	44	57	68	81	85	87	89	94	100	--
MAY 7.......	0800	12.0	17600	381	18100	35	45	57	68	79	84	87	89	100	--	--
AUG. 27.....	0815	23.5	1460	3720	14700	41	57	78	92	100	--	--	--	--	--	--

No byr

03146000 NORTH FORK LICKING RIVER AT UTICA, OHIO

LOCATION.--Lat 40°13'41", long 82°27'06", in T.4 N., R.12 W., Licking County, at gaging station on left bank at upstream side of bridge on State Highway 13 at south edge of Utica, 0.2 mile downstream from unnamed right bank tributary, and 2 miles upstream from Lake Fork.

DRAINAGE AREA.--116 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1970-71 (partial-record station).
Water temperatures: November 1970 to September 1971.
Sediment records: Water years 1970-71 (partial-record station).

EXTREMES.--1970-71:
Water temperatures: Maximum, 28.5°C June 30, July 9; minimum, freezing point Feb. 5, 19.

Period of record:
Water temperatures: Maximum, 28.5°C June 30, July 9, 1971; minimum, freezing point Feb. 5, 19, 1971.

REMARKS.--Samples for iron and manganese filtered clear when collected. Special samples were also collected twice a year to further define the quality of water. Continuous temperature recorder operated since November 1970. Interruptions in the record were due to malfunctions of the instrument. Sediment data for this station on page 387.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	CHLO-RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL RESI-DUE (MG/L)
JULY											
13...	1115	11	280	78	280	0	11	2.3	.02	342	383
27...	1110	5.4	320	140	282	0	12	1.2	.19	335	380
AUG.											
12...	0830	4.9	200	120	286	0	12	.8	.10	350	362
26...	1130	3.0	350	89	284	0	13	1.2	.00	334	364
SEP.											
08...	1100	2.6	150	79	296	0	9.5	.8	.03	334	374
23...	1000	4.9	370	90	300	0	10	.9	.07	318	324

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	IMME-DIATE COLI-FORM (COL. PER 100 ML)
JULY											
13...	270	40	550	7.8	22.5	7	7.0	80	1.2	960	--
27...	270	38	561	7.9	21.0	10	7.2	80	2.7	1000	2800
AUG.											
12...	280	45	568	7.9	20.5	15	6.2	68	1.8	100	4300
26...	270	38	561	7.9	20.5	15	5.8	64	1.2	500	1600
SEP.											
08...	280	37	569	8.0	23.0	10	5.0	57	1.2	140	2400
23...	280	34	578	7.9	16.0	9	7.4	74	1.0	1300	2600

DATE	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ARSENIC (AS) (UG/L)
OCT. 15, 1970...	0	8.1	170	57	21	3.0	0
JUNE 9, 1971...	--	1.3	--	--	--	11	--

03146000 NORTH FORK LICKING RIVER AT UTICA, OHIO--Continued

TEMPERATURE (°C) OF WATER, NOVEMBEP 1970 TO SEPTEMBER 1971
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	9.5	8.0	2.0	1.5	4.5	2.0	6.5	5.0
2	---	---	---	---	10.0	9.0	3.0	1.5	5.0	2.0	6.5	6.5
3	---	---	---	---	10.0	8.0	3.0	1.5	2.0	2.0	6.5	4.0
4	---	---	---	---	9.0	7.0	4.0	1.5	2.0	0.5	4.0	3.0
5	---	---	---	---	7.0	5.0	4.0	2.0	2.0	0.0	4.5	3.0
6	---	---	---	---	5.0	3.0	2.0	1.0	2.0	1.5	4.5	4.0
7	---	---	---	---	3.0	2.0	2.0	1.0	2.0	2.0	4.5	4.0
8	---	---	---	---	2.0	2.0	2.0	1.0	3.0	2.0	4.0	3.0
9	---	---	---	---	4.5	2.0	2.0	1.5	3.5	2.0	4.0	2.0
10	---	---	---	---	5.0	4.5	1.5	0.5	3.5	2.0	4.0	3.5
11	---	---	---	---	5.5	4.5	1.5	1.0	2.0	1.0	4.5	3.5
12	---	---	---	---	6.5	5.5	1.5	1.0	1.5	1.0	6.0	4.0
13	---	---	---	---	6.5	6.0	1.5	1.5	2.0	1.5	6.0	4.0
14	---	---	---	---	6.0	4.0	3.5	1.0	3.5	2.0	8.5	4.5
15	---	---	---	---	4.5	3.0	3.5	2.0	2.0	2.0	10.0	8.5
16	---	---	---	---	3.5	3.0	2.0	1.5	2.0	1.0	9.5	6.5
17	---	---	---	---	4.5	3.5	2.0	1.0	2.0	1.5	6.5	5.0
18	---	---	---	---	4.5	4.5	4.5	1.5	2.0	1.0	5.5	4.5
19	---	---	---	---	6.0	4.0	3.0	1.5	1.5	0.0	6.0	5.5
20	---	---	8.0	6.0	6.0	5.0	2.0	1.5	1.5	0.5	5.5	4.5
21	---	---	8.0	6.5	5.0	3.5	1.5	1.0	3.0	1.5	6.5	3.5
22	---	---	6.5	6.5	4.5	3.5	1.5	0.5	3.0	1.5	6.5	6.5
23	---	---	6.5	3.0	6.0	4.5	1.5	1.0	3.5	3.0	6.5	5.0
24	---	---	3.0	1.5	6.0	3.0	1.5	1.0	4.0	3.0	5.5	4.0
25	---	---	2.0	1.5	3.0	1.5	1.0	1.0	5.5	3.0	6.5	5.5
26	---	---	1.5	1.0	2.0	1.0	2.0	1.0	5.5	4.0	8.0	6.0
27	---	---	4.5	1.0	1.5	1.0	1.5	1.5	6.5	4.5	8.5	6.5
28	---	---	7.0	4.5	1.5	1.5	1.5	1.5	6.5	4.5	10.0	8.0
29	---	---	8.0	7.0	3.0	1.5	1.5	0.5	---	---	10.0	7.0
30	---	---	9.5	8.5	3.0	1.5	2.0	0.5	---	---	14.0	5.5
31	---	---	---	---	2.0	2.0	4.0	2.0	---	---	19.0	5.0
MONTH	---	---	---	---	10.0	1.0	4.5	0.5	6.5	0.0	19.0	2.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	8.5	12.0	9.5	20.5	17.0	27.0	25.5	---	---	23.5	20.5
2	10.0	9.0	12.0	11.0	20.5	19.0	27.0	24.0	---	---	24.0	21.0
3	9.5	7.0	11.5	9.5	21.5	19.5	26.0	21.5	---	---	24.0	21.5
4	10.0	8.5	13.5	9.5	23.0	19.5	25.5	21.0	---	---	24.0	21.0
5	9.0	5.5	13.0	11.0	24.0	21.0	26.5	23.0	---	---	25.0	21.5
6	13.5	5.5	13.5	11.0	24.0	18.0	27.0	23.5	---	---	25.5	22.0
7	---	---	13.5	11.0	21.0	18.5	27.0	23.0	---	---	24.5	22.0
8	---	---	15.0	10.5	21.5	20.0	26.5	23.5	---	---	25.0	21.5
9	---	---	15.0	11.5	20.5	19.0	28.5	24.5	---	---	25.0	22.0
10	---	---	16.0	12.0	20.0	16.5	27.0	24.5	---	---	25.0	22.0
11	---	---	16.0	14.0	20.5	18.0	26.0	24.0	---	---	25.0	22.0
12	---	---	14.5	14.0	21.0	19.5	25.0	22.0	24.0	20.0	22.0	21.0
13	---	---	14.0	12.0	22.0	20.0	25.0	22.0	23.5	19.5	21.5	19.0
14	---	---	14.0	11.5	23.5	20.5	---	---	24.5	19.5	21.0	18.0
15	---	---	16.0	13.5	23.5	21.0	---	---	24.0	21.0	21.5	18.5
16	---	---	18.5	15.0	22.0	20.0	---	---	24.0	20.0	21.5	18.5
17	---	---	19.0	15.5	23.0	19.5	---	---	24.0	19.5	19.0	18.0
18	---	---	21.0	17.0	23.5	19.5	---	---	24.0	20.0	18.5	17.0
19	---	---	21.0	19.0	25.0	21.5	---	---	24.0	20.5	19.0	18.0
20	16.0	14.5	21.0	19.0	25.5	23.0	---	---	24.0	21.5	19.0	18.0
21	16.0	12.0	20.5	17.0	26.5	24.0	---	---	25.0	21.5	18.0	16.0
22	12.0	10.0	19.0	16.0	25.5	22.0	---	---	25.0	22.0	18.5	15.0
23	13.0	9.0	18.5	15.0	24.5	21.0	---	---	24.5	21.5	18.0	15.5
24	13.0	10.0	18.0	16.0	24.5	21.5	---	---	23.5	19.5	18.0	15.0
25	13.5	10.0	18.0	16.0	25.0	23.0	---	---	22.0	19.5	17.0	14.0
26	13.5	11.5	16.0	14.5	25.0	23.0	---	---	22.0	19.5	17.0	14.5
27	11.5	9.5	14.5	13.5	25.5	23.0	---	---	23.5	20.0	18.5	16.0
28	14.0	10.5	14.0	11.5	28.0	24.5	---	---	23.5	20.0	20.5	18.0
29	13.5	11.0	16.0	13.0	28.0	25.0	---	---	22.0	19.5	23.0	19.0
30	11.5	10.0	18.5	14.0	28.5	25.0	---	---	23.5	19.0	23.5	20.5
31	---	---	20.0	15.5	---	---	---	---	23.5	20.0	---	---
MONTH	---	---	21.0	9.5	28.5	16.5	---	---	---	---	25.5	14.0
YEAR	28.5	0.0										

03146500 LICKING RIVER NEAR NEWARK, OHIO

LOCATION.--Lat 40°03'33", long 82°20'23", in SW 1/4 T.2 N., R.11 W., Licking County, at gaging station on right bank at downstream side of Stadden Bridge, 1 mile downstream from Shawnee Run, 1.5 miles upstream from Equality Run, and 3.5 miles east of Newark.

DRAINAGE AREA.--537 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1971.
Water temperatures: June 1962 to September 1971.

EXTREMES.--1970-1971:
Specific conductance: Maximum, 1,650 micromhos Feb. 4; minimum, 156 micromhos July 25.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.							
15...	1900	--	--	--	--	--	--
20...	1400	221	186	5	64	30	.4
29...	1600	147	228	0	110	85	.7
NOV.							
05...	1600	634	186	0	66	20	.3
13...	--	187	268	0	92	93	.5
DEC.							
10...	1605	254	242	0	83	82	.4
23...	1520	2010	122	0	50	17	.3
JAN.							
04...	1625	3260	138	0	42	13	.3
25...	1610	180	232	14	110	53	.5
FEB.							
04...	1555	330	162	0	77	270	.4
18...	1605	1780	72	0	26	22	.1
MAR.							
04...	1517	660	206	0	69	46	.3
08...	1520	1520	136	0	49	23	.3
APR.							
01...	1600	348	222	0	75	74	.3
05...	1604	392	213	0	70	25	.3
MAY							
06...	1605	3470	154	0	43	15	.2
27...	1600	251	230	0	73	82	.3
JUNE							
07...	1604	1080	130	0	39	12	.2
15...	1800	--	--	--	--	--	--
21...	1600	110	238	0	92	83	.4
JULY							
14...	1150	92	252	0	94	100	.5
26...	1720	233	166	0	65	26	.2
AUG.							
23...	1040	66	232	0	100	72	.4
30...	1605	66	224	0	110	42	.4
SEP.							
13...	1605	98	230	0	100	210	.6
30...	1600	72	188	0	89	74	.5

03146500 LICKING RIVER NEAR NEWARK, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-71): Maximum, 1,650 micromhos Feb. 4, 1971; minimum, 156 micromhos July 25, 1971.
Water temperatures (1962-68, 1969-70): Maximum, 29.0°C Aug. 16, 17, 1965, Aug. 1, 1970; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since July 1968. Minimum recorded specific conductance value of 100 micromhos occurred Aug. 18, 1969. Interruptions in the record were due to malfunctions of the instrument. Tabular data omitted for those periods when no data were recorded. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
15...	--	--	--	--	--	12	3.5
20...	14	368	230	69	547	--	--
29...	34	556	280	92	883	--	--
NOV.							
05...	15	336	230	78	496	--	--
13...	7.1	532	310	90	886	--	--
DEC.							
10...	23	482	290	91	800	--	--
23...	15	238	160	60	367	--	--
JAN.							
04...	9.2	222	160	47	354	--	--
25...	20	480	300	86	742	--	--
FEB.							
04...	28	750	270	140	1260	--	--
18...	11	152	92	33	268	--	--
MAR.							
04...	12	358	250	81	618	--	--
08...	15	234	170	58	406	--	--
APR.							
01...	15	454	270	88	752	--	--
05...	8.8	356	260	85	558	--	--
MAY							
06...	8.6	218	180	54	366	--	--
27...	21	480	280	91	792	--	--
JUNE							
07...	17	194	160	54	357	--	--
15...	--	--	--	--	--	10	.8
21...	17	504	310	110	888	--	--
JULY							
14...	21	598	310	100	972	--	--
26...	12	326	210	74	494	--	--
AUG.							
23...	20	548	310	120	877	--	--
30...	20	488	310	130	694	--	--
SEP.							
13...	34	762	330	140	1360	--	--
30...	30	458	270	120	806	--	--

MUSKINGUM RIVER BASIN

03146500 LICKING RIVER NEAR NEWARK, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	681	648	477	459	622	616	---	---	---	---
2	---	---	877	409	486	447	658	622	762	720	---	---
3	---	---	421	355	486	438	661	622	789	729	---	---
4	---	---	517	421	480	441	682	298	1650	762	---	---
5	---	---	604	493	477	429	367	316	---	---	---	---
6	---	---	636	564	441	408	457	367	---	---	---	---
7	---	---	---	---	513	429	523	457	---	---	---	---
8	---	---	---	---	771	513	589	523	---	---	---	---
9	---	---	643	555	801	636	613	571	---	---	---	---
10	---	---	766	643	798	726	628	589	---	---	---	---
11	---	---	804	720	729	612	634	598	---	---	587	536
12	---	---	864	696	681	300	640	622	---	---	590	494
13	---	---	890	791	351	273	790	631	---	---	494	335
14	---	---	841	532	459	351	724	571	---	---	428	377
15	---	---	532	417	468	426	592	571	---	---	464	389
16	---	---	500	416	441	423	607	580	675	537	---	---
17	---	---	662	479	426	408	643	601	681	297	---	---
18	---	---	661	522	438	405	664	622	297	225	476	461
19	---	---	624	531	480	438	709	658	225	---	548	476
20	652	568	531	483	522	480	685	658	---	---	566	476
21	721	634	495	447	591	510	685	670	---	---	530	497
22	708	654	471	450	573	351	799	670	---	---	542	473
23	818	695	459	450	351	324	790	667	---	---	590	515
24	868	760	510	459	381	351	706	661	---	---	608	539
25	810	648	513	492	---	---	811	673	---	---	632	524
26	947	620	525	504	---	---	811	760	---	---	650	521
27	931	877	552	495	---	---	886	742	---	---	701	566
28	898	673	546	444	601	583	748	694	---	---	653	572
29	933	630	444	420	646	601	742	706	---	---	647	575
30	1050	661	492	429	631	604	---	---	---	---	680	549
31	704	593	---	---	640	613	---	---	---	---	708	552
MONTH	---	---	890	355	801	273	886	298	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	834	588	697	631	851	617	867	444	711	399	915	837
2	777	546	727	601	917	653	600	417	774	612	963	828
3	615	531	906	642	800	611	639	513	792	660	939	861
4	612	540	903	783	659	605	717	618	738	642	1020	900
5	600	549	948	819	683	596	672	645	735	606	975	852
6	580	541	---	---	686	449	906	672	768	705	861	792
7	614	554	---	---	---	---	1030	906	792	744	918	798
8	609	558	---	---	515	443	1100	732	819	756	1250	909
9	606	555	---	---	629	485	1100	741	801	666	1260	1140
10	613	541	492	357	767	569	840	714	732	546	1370	1220
11	608	548	536	458	812	617	807	591	777	672	1360	1100
12	627	579	605	503	830	647	912	705	846	606	1310	1190
13	645	603	668	515	809	698	924	828	861	768	1390	1020
14	630	591	644	518	728	659	972	741	843	693	1170	966
15	642	567	668	572	738	656	990	744	846	603	1230	969
16	1010	630	716	518	900	717	888	504	870	633	1220	945
17	809	644	743	518	861	798	858	687	---	---	1180	999
18	830	707	845	515	876	759	900	750	---	---	1220	894
19	836	677	749	623	930	729	939	720	765	696	1210	837
20	889	637	740	575	900	807	1010	726	855	654	1180	1040
21	727	658	768	608	924	714	1190	726	---	---	1200	855
22	1050	589	842	620	903	789	1040	795	---	---	1210	852
23	972	651	914	749	900	771	1110	795	849	765	981	822
24	966	621	824	650	954	834	1080	261	924	768	876	843
25	780	681	812	563	996	768	447	156	861	777	897	813
26	722	659	692	620	849	675	639	342	777	609	819	714
27	902	690	836	611	705	621	633	579	741	651	1160	708
28	793	661	824	677	717	627	693	573	777	735	1230	978
29	715	658	821	605	750	558	759	657	744	723	1280	1030
30	715	655	827	599	762	708	777	435	759	723	885	612
31	---	---	665	617	---	---	732	528	837	756	---	---
MONTH	1050	531	948	357	996	443	1190	156	924	399	1390	612
YEAR	1650	156										

03146500 LICKING RIVER NEAR NEWARK, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.6	7.8	8.1	7.6	8.0	7.8	7.4	7.1	8.0	7.6	7.6	7.4
2	8.4	7.9	8.2	7.6	7.9	7.6	7.3	7.1	8.1	7.7	7.6	7.4
3	8.5	8.1	8.4	7.6	8.2	7.6	7.3	7.2	7.9	7.6	7.6	7.4
4	8.5	8.0	8.3	7.8	8.2	7.7	7.4	7.3	7.9	7.5	7.5	7.4
5	8.5	8.0	8.1	7.7	7.8	7.6	7.6	7.3	8.1	7.7	7.6	7.4
6	8.5	8.0	---	---	7.9	7.5	7.5	7.4	8.1	7.7	7.5	7.3
7	8.5	8.0	---	---	8.1	7.3	7.6	7.4	8.1	7.6	7.5	7.3
8	8.4	7.9	---	---	7.8	7.8	7.7	7.3	8.0	7.5	7.5	7.3
9	8.4	7.8	---	---	7.9	7.8	7.7	7.3	8.0	7.4	7.6	7.3
10	8.5	7.9	8.2	8.1	7.9	7.8	7.6	7.3	7.9	7.4	7.6	7.4
11	8.5	7.9	8.4	8.1	8.0	7.9	8.0	7.3	7.8	7.5	7.5	7.4
12	8.4	7.8	8.2	7.7	7.9	7.9	7.8	7.4	7.8	7.6	7.5	7.4
13	8.3	7.6	8.2	8.1	8.1	7.9	7.9	7.5	7.8	7.5	7.5	7.3
14	8.4	7.7	8.2	8.1	8.0	7.8	8.2	7.5	7.8	7.4	7.5	7.3
15	8.3	7.8	8.2	8.1	8.2	7.5	8.1	7.8	7.8	7.4	7.5	7.3
16	8.2	7.7	8.1	7.9	7.6	7.4	7.9	7.5	7.8	7.4	7.5	7.3
17	8.0	7.6	8.4	7.9	7.6	7.5	7.9	7.7	---	---	7.5	7.5
18	8.2	7.6	8.1	7.9	7.5	7.3	7.9	7.7	---	---	7.5	7.4
19	8.4	7.6	8.1	7.9	7.4	7.2	7.7	7.6	7.7	7.4	7.5	7.4
20	8.3	7.7	8.2	7.8	7.5	7.3	7.7	7.6	7.7	7.3	7.8	7.4
21	8.0	7.5	8.0	7.9	7.4	7.1	7.8	7.5	---	---	7.8	7.6
22	8.1	7.7	8.0	7.8	7.3	7.2	7.9	7.5	---	---	7.8	7.6
23	8.0	7.7	8.0	7.8	7.4	7.3	7.8	7.5	7.6	7.4	7.8	7.6
24	7.9	7.5	8.0	7.7	7.4	7.2	7.6	7.3	7.6	7.5	7.8	7.5
25	7.9	7.6	8.0	7.7	7.3	7.1	7.5	7.1	7.5	7.4	7.9	7.6
26	8.3	7.5	8.1	7.9	7.4	7.2	7.9	7.4	7.5	7.3	7.8	7.4
27	8.4	7.9	8.0	7.9	7.6	7.2	8.1	7.9	7.4	7.3	7.7	7.4
28	8.2	7.6	8.0	7.8	7.4	7.2	8.1	7.9	7.4	7.3	7.7	7.5
29	8.1	7.6	7.9	7.8	7.4	7.2	8.0	7.8	7.5	7.3	7.7	7.4
30	8.2	7.6	7.9	7.7	7.3	7.2	8.0	7.7	7.7	7.3	7.6	7.3
31	---	---	8.1	7.7	---	---	7.9	7.7	7.7	7.4	---	---
MONTH	8.6	7.5	8.4	7.6	8.2	7.1	8.2	7.1	8.1	7.3	7.9	7.3

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	16.0	13.0	9.5	7.0	2.5	1.5	---	---	---	---
2	---	---	14.5	12.5	10.0	8.0	3.5	2.0	0.5	0.5	---	---
3	---	---	12.5	10.5	9.5	7.0	3.5	2.0	0.5	0.5	---	---
4	---	---	10.5	10.0	9.5	6.5	3.5	2.5	0.5	0.0	---	---
5	---	---	10.0	9.5	6.5	4.5	2.5	1.0	1.0	0.0	---	---
6	---	---	10.0	9.5	4.5	2.0	1.5	0.5	1.0	1.0	---	---
7	---	---	---	---	3.0	2.0	1.0	0.5	1.0	1.0	---	---
8	---	---	---	---	6.0	2.5	1.0	0.5	1.0	0.5	---	---
9	---	---	14.0	13.0	9.0	5.0	2.0	1.0	0.5	0.5	---	---
10	---	---	14.0	12.5	7.0	5.5	2.5	1.0	0.5	0.5	---	---
11	---	---	13.5	12.0	9.0	6.0	3.0	2.0	0.5	0.5	---	---
12	---	---	13.5	13.0	9.0	6.5	3.0	2.5	0.5	0.5	---	---
13	---	---	13.0	12.0	9.0	6.5	3.0	2.0	0.5	0.5	---	---
14	---	---	12.0	10.0	---	3.5	3.5	3.0	0.5	0.5	---	---
15	---	---	9.5	6.5	4.0	2.5	3.0	1.5	0.5	0.5	---	---
16	---	---	6.5	6.0	4.0	3.0	2.0	1.0	0.5	0.0	---	---
17	---	---	7.5	4.5	4.5	4.0	2.0	1.0	0.5	0.0	---	---
18	---	---	7.5	5.5	4.5	4.0	1.5	0.5	0.5	0.0	---	---
19	---	---	8.5	6.0	7.5	1.5	1.5	0.5	0.0	0.0	---	---
20	14.0	12.5	9.0	7.5	6.5	0.5	2.0	0.5	---	---	---	---
21	15.0	14.0	8.0	6.0	5.0	0.5	2.0	1.5	---	---	---	---
22	17.5	14.5	7.0	6.0	5.0	4.5	3.0	1.5	---	---	---	---
23	16.0	13.0	6.0	1.5	5.5	5.0	3.0	2.0	---	---	---	---
24	17.0	13.0	2.5	0.5	5.0	2.0	3.0	2.0	---	---	---	---
25	17.5	13.5	2.0	0.5	2.5	1.0	4.0	3.0	---	---	---	---
26	17.5	13.0	4.0	1.5	1.0	0.0	3.5	0.5	---	---	---	---
27	17.0	14.0	6.5	4.0	2.5	1.0	0.5	0.5	---	---	---	---
28	16.5	14.0	7.5	6.0	2.0	1.0	1.0	0.5	---	---	---	---
29	16.0	14.5	7.0	5.5	2.5	1.5	1.5	1.0	---	---	---	---
30	16.0	15.0	8.0	6.5	2.5	1.5	2.0	1.0	---	---	9.5	9.5
31	18.0	15.0	---	---	2.0	1.5	1.5	1.0	---	---	9.5	9.0
MONTH	---	---	16.0	0.5	10.0	0.0	4.0	0.5	---	---	---	---

03146500 LICKING RIVER NEAR NEWARK, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	2.8	---	7.2	6.1	10.2	9.8	---	---	---	---
2	---	---	4.7	---	7.0	5.2	10.1	9.6	11.5	11.1	---	---
3	---	---	8.4	4.0	6.4	5.1	10.2	9.4	11.2	10.8	---	---
4	---	---	8.4	7.7	5.5	4.2	10.9	9.2	11.4	10.4	---	---
5	---	---	8.9	7.4	5.5	4.0	10.9	10.6	11.2	10.4	---	---
6	---	---	8.8	---	5.4	4.2	11.4	10.9	---	---	---	---
7	---	---	---	---	6.7	4.9	11.2	8.5	---	---	---	---
8	---	---	---	---	6.2	4.8	10.5	9.4	---	---	---	---
9	---	---	9.1	7.4	5.4	4.1	9.7	9.3	---	---	---	---
10	---	---	7.5	6.5	4.1	3.3	9.4	9.0	---	---	---	---
11	---	---	6.7	6.1	3.4	1.3	10.1	9.0	---	---	---	---
12	---	---	6.1	5.4	6.2	1.1	9.5	9.2	---	---	---	---
13	---	---	5.5	4.8	5.4	1.3	9.4	8.6	---	---	---	---
14	---	---	4.8	3.4	6.5	2.2	9.3	8.4	---	---	---	---
15	---	---	4.8	3.7	7.2	6.5	9.3	9.0	---	---	---	---
16	---	---	8.5	4.6	6.8	4.2	9.4	8.9	---	---	---	---
17	---	---	8.4	7.7	4.3	3.5	8.9	8.6	---	---	---	---
18	---	---	8.4	7.5	3.4	2.9	8.8	8.5	---	---	---	---
19	---	---	8.1	7.1	2.9	2.3	8.7	8.3	---	---	---	---
20	7.3	4.6	7.3	6.6	10.9	2.2	8.6	8.0	---	---	---	---
21	4.6	2.5	7.3	6.6	10.4	0.9	10.8	8.0	---	---	---	---
22	5.1	2.8	7.2	6.5	10.4	1.4	10.6	9.9	---	---	---	---
23	3.6	1.4	8.8	6.8	9.9	---	10.4	9.0	---	---	---	---
24	2.4	---	8.7	8.1	11.0	4.8	10.4	9.9	---	---	---	---
25	2.4	---	9.0	8.2	11.5	3.1	10.1	9.5	---	---	---	---
26	6.2	---	8.6	7.9	11.6	10.7	10.3	9.2	---	---	---	---
27	3.6	1.1	8.0	7.2	10.7	10.4	10.3	9.8	---	---	---	---
28	1.1	---	8.0	7.0	10.9	10.1	10.1	9.3	---	---	---	---
29	---	---	8.5	7.1	10.4	10.0	10.1	9.7	---	---	---	---
30	---	---	7.7	6.0	10.4	9.7	10.1	9.2	---	---	10.2	8.3
31	---	---	---	---	9.9	9.6	---	---	---	---	10.5	7.9
MONTH	---	---	9.1	3.4	11.6	0.9	11.4	8.0	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.3	8.1	---	---	6.7	5.3	5.2	4.1	3.0	2.3	2.3	1.6
2	11.7	7.8	---	---	5.7	4.7	5.5	4.9	3.0	2.7	2.5	1.3
3	12.1	8.8	---	---	5.8	4.2	5.5	4.6	3.2	2.4	2.3	1.4
4	12.8	8.6	---	---	6.0	5.0	5.1	4.6	3.2	1.9	2.2	1.5
5	12.8	8.3	---	---	5.0	4.1	5.2	4.5	3.2	2.6	2.5	1.4
6	---	---	---	---	4.8	4.0	4.8	4.5	3.3	2.8	2.8	1.3
7	---	---	---	---	6.3	6.1	4.5	4.2	3.2	2.7	2.5	1.8
8	---	---	---	---	6.3	5.6	4.8	3.5	3.2	2.7	2.5	1.6
9	---	---	---	---	6.5	5.9	4.5	2.8	3.4	1.8	2.8	1.5
10	---	---	8.6	6.9	6.6	5.6	4.3	3.1	2.9	1.2	2.7	1.8
11	---	---	7.5	7.0	6.9	5.8	4.3	2.0	2.8	1.2	2.1	1.4
12	---	---	7.4	7.1	6.0	5.6	4.9	3.8	3.4	2.3	1.5	1.4
13	---	---	7.9	7.4	6.1	5.7	5.2	3.4	3.6	2.5	2.6	1.4
14	---	---	8.1	6.9	6.7	5.7	4.9	3.8	3.3	1.7	2.6	2.2
15	---	---	7.5	6.5	7.4	6.8	4.4	3.2	3.6	1.6	2.4	2.1
16	---	---	7.0	5.8	7.2	6.9	3.9	3.2	3.5	1.9	2.7	2.1
17	---	---	6.8	5.9	6.9	6.4	4.0	3.4	---	---	2.8	2.6
18	---	---	6.5	5.1	6.3	5.6	3.7	3.1	---	---	2.7	2.2
19	---	---	5.5	5.0	5.6	4.8	3.2	2.6	---	---	2.5	2.0
20	---	---	5.9	4.6	5.6	4.9	3.0	2.5	---	---	2.2	2.0
21	---	---	5.8	4.7	6.3	4.7	3.5	2.6	---	---	2.1	1.8
22	---	---	4.8	3.9	6.3	5.8	4.4	2.0	---	---	2.0	1.8
23	---	---	4.9	3.9	5.8	5.1	3.5	2.2	2.4	2.0	1.8	1.7
24	---	---	7.0	4.4	5.2	4.4	3.0	1.4	1.9	1.7	1.9	1.8
25	---	---	6.9	5.7	4.8	4.1	4.2	3.0	1.7	1.6	1.9	1.8
26	---	---	7.5	6.7	4.8	4.1	4.3	4.0	1.7	1.3	1.9	1.6
27	---	---	8.0	6.9	4.6	3.7	4.2	3.9	1.8	1.4	1.7	1.6
28	---	---	7.9	6.9	5.3	3.7	4.4	3.5	2.1	1.7	1.7	1.5
29	---	---	7.5	6.6	5.4	4.8	3.9	2.6	2.4	2.0	1.6	1.5
30	---	---	7.1	6.1	4.9	4.2	3.2	2.4	2.7	2.1	2.2	1.5
31	---	---	7.0	5.9	---	---	3.7	2.2	2.7	1.8	---	---
MONTH	---	---	---	---	7.4	3.7	5.5	1.4	3.6	1.2	2.8	1.3

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03147500 LICKING RIVER BELOW DILLON DAM, NEAR DILLON FALLS, OHIO

LOCATION.--Lat 39°59'18", long 82°04'50", in T.1 N., R.8 W., Muskingum County, temperature recorder at gaging station on left bank, 500 ft downstream from Dillon Dam, 2 miles northwest of Dillon Falls, and 5.8 miles upstream from mouth.

DRAINAGE AREA.--742 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1961 to September 1971.

EXTREMES.--1970-71:
Water temperatures: Maximum, 26.0°C July 3, 11, 12, 14-18, 20; minimum, 1.0°C Feb. 11-21.

Period of record:
Water temperatures: Maximum, 27.0°C June 17-19, 1967; minimum, freezing point Feb. 7-12, 1967.

REMARKS.--Chemical data for this station are published on page 357.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	19.0	13.5	13.5	5.0	4.5	2.0	1.5	3.0	2.5	3.0	2.0
2	19.0	18.5	13.5	13.5	6.5	5.0	2.0	1.5	3.0	3.0	3.5	3.0
3	19.0	18.5	13.5	13.5	6.5	6.5	2.0	2.0	3.0	3.0	4.0	3.5
4	18.5	18.5	13.5	13.0	6.5	6.5	2.0	2.0	3.0	3.0	4.0	3.0
5	18.5	18.0	13.0	12.5	6.5	6.5	2.0	2.0	3.0	2.0	3.0	2.5
6	18.0	18.0	12.5	11.5	6.5	6.0	2.0	2.0	2.0	1.5	3.0	2.5
7	18.0	17.0	11.5	11.0	6.0	5.5	2.0	2.0	1.5	1.5	3.5	3.0
8	17.0	16.5	11.0	10.5	5.5	4.5	2.0	2.0	1.5	1.5	3.5	2.5
9	17.0	17.0	10.5	10.0	4.5	4.0	2.0	2.0	1.5	1.5	3.0	2.5
10	17.0	17.0	10.5	10.0	4.0	4.0	2.0	2.0	1.5	1.5	3.0	2.5
11	17.0	17.0	10.5	10.0	4.0	4.0	2.0	2.0	1.5	1.0	3.5	2.5
12	17.5	17.0	10.5	10.5	4.0	4.0	2.0	2.0	1.0	1.0	4.0	3.5
13	17.5	17.5	10.5	10.5	4.5	4.0	2.0	1.5	1.0	1.0	6.0	4.0
14	17.5	17.0	10.5	10.5	4.0	4.0	2.0	1.5	1.0	1.0	6.0	5.5
15	17.5	17.0	10.5	10.0	4.5	4.0	2.0	1.5	1.0	1.0	8.0	6.0
16	17.0	16.0	10.0	10.0	5.0	4.0	2.0	2.0	1.0	1.0	9.0	7.5
17	16.0	16.0	10.5	9.5	5.0	4.0	2.5	2.0	1.0	1.0	7.5	6.0
18	16.0	15.5	9.5	9.0	4.0	4.0	3.0	2.5	1.0	1.0	6.5	6.0
19	15.5	15.0	9.0	8.5	4.0	4.0	3.5	3.0	1.0	1.0	6.0	6.0
20	15.0	14.5	8.5	8.0	4.0	4.0	3.5	3.0	1.0	1.0	6.0	5.5
21	14.5	14.0	7.5	7.5	4.0	4.0	3.5	3.0	1.5	1.0	5.5	4.5
22	14.5	14.0	7.5	7.0	4.0	4.0	3.0	3.0	2.0	1.5	5.5	5.0
23	14.0	14.0	7.0	6.0	4.0	4.0	3.0	3.0	2.0	2.0	6.5	5.5
24	14.0	13.5	6.0	5.5	4.0	4.0	3.0	2.5	2.0	2.0	6.0	5.5
25	14.0	13.5	5.5	4.5	4.0	3.5	2.5	2.5	2.0	2.0	6.0	5.5
26	13.5	13.5	4.5	4.0	3.5	3.0	2.5	2.5	2.0	2.0	7.0	6.0
27	13.5	13.5	4.0	4.0	3.0	2.0	2.5	2.5	2.0	1.5	8.0	7.0
28	13.5	13.5	4.5	4.0	2.0	1.5	2.5	2.5	2.0	1.5	9.5	8.0
29	13.5	13.5	4.5	4.5	2.0	2.0	2.5	2.0	---	---	9.5	9.5
30	13.5	13.5	4.5	4.5	2.0	2.0	2.0	2.0	---	---	9.5	9.5
31	13.5	13.5	---	---	2.0	2.0	2.5	2.0	---	---	9.5	9.0
MONTH	20.0	13.5	13.5	4.0	6.5	1.5	3.5	1.5	3.0	1.0	9.5	2.0

03147500 LICKING RIVER BELOW DILLON DAM, NEAR DILLON FALLS, OHIO--Continued

TEMPERATURE (C°) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	9.5	14.0	14.0	19.0	19.0	24.0	24.0	24.0	23.5	23.5	23.5
2	11.0	10.5	14.0	14.0	19.0	19.0	25.5	24.0	23.5	23.5	23.5	23.5
3	11.0	11.0	14.0	14.0	19.5	19.0	26.0	25.5	23.5	23.5	23.5	23.5
4	12.0	11.0	14.0	13.5	20.0	19.5	25.5	25.0	23.0	23.0	23.5	23.5
5	12.0	11.0	14.0	14.0	20.0	20.0	25.0	25.0	23.5	23.0	24.0	23.5
6	11.5	11.0	14.0	14.0	22.5	20.0	25.0	25.0	23.5	23.0	24.0	23.5
7	11.5	10.5	14.5	14.0	23.0	20.0	25.0	25.0	23.5	23.5	24.0	23.5
8	11.5	11.0	15.5	14.5	24.0	22.5	25.0	25.0	23.5	23.5	24.0	24.0
9	13.0	11.5	15.5	15.0	23.5	22.0	25.0	25.0	23.5	23.5	24.0	24.0
10	14.5	13.0	15.5	15.0	22.0	22.0	25.5	25.0	23.5	23.5	24.0	24.0
11	14.5	14.0	15.5	15.0	22.0	22.0	26.0	25.5	24.0	23.5	24.0	24.0
12	15.0	14.0	16.5	15.5	22.0	22.0	26.0	25.5	24.0	23.5	24.0	23.5
13	17.0	15.0	16.5	16.5	22.0	21.5	25.5	25.5	23.5	23.5	24.0	23.5
14	17.0	16.5	17.0	16.0	22.5	21.5	26.0	25.5	23.5	23.5	24.0	24.0
15	17.0	16.0	17.0	16.5	22.5	22.0	26.0	25.5	23.5	23.5	24.0	24.0
16	16.5	15.5	17.5	16.5	22.0	22.0	26.0	25.5	23.5	23.5	24.0	23.5
17	16.0	15.5	18.0	16.5	22.0	22.0	26.0	25.5	24.0	23.5	24.0	23.5
18	16.0	15.5	18.5	17.5	22.0	22.0	26.0	25.5	24.0	23.5	23.5	22.5
19	15.5	15.5	18.5	18.0	22.0	22.0	25.5	25.5	23.5	23.5	22.5	22.5
20	16.0	15.5	19.0	18.5	22.0	22.0	26.0	25.5	23.5	23.5	22.5	22.5
21	15.5	15.5	19.5	18.5	22.0	22.0	25.5	25.0	23.5	23.5	22.5	22.0
22	15.5	15.5	19.5	19.5	22.0	21.5	25.0	25.0	23.5	23.5	22.5	22.0
23	15.5	15.5	19.5	18.5	22.0	21.5	25.0	24.5	24.0	23.5	22.0	22.0
24	15.5	15.5	19.0	18.5	21.5	21.5	24.5	24.5	24.5	24.0	22.0	21.5
25	15.5	15.5	20.0	19.0	22.0	21.5	24.5	24.5	24.0	24.0	21.5	21.5
26	15.5	15.0	20.0	19.5	22.5	22.0	25.0	24.5	24.0	23.5	21.5	21.0
27	15.0	14.5	19.5	19.5	23.5	22.5	25.0	24.5	24.0	23.5	21.5	21.5
28	14.5	14.5	19.5	19.5	23.5	23.5	24.5	24.5	24.0	24.0	21.5	21.0
29	14.5	14.5	19.5	19.5	24.5	23.5	24.5	24.5	24.0	24.0	21.5	21.0
30	14.5	14.0	19.5	19.0	24.5	24.0	24.5	24.5	24.0	24.0	21.5	21.0
31	---	---	19.5	18.5	---	---	24.5	24.0	24.0	23.5	---	---
MONTH	17.0	9.5	20.0	13.5	24.5	19.0	26.0	24.0	24.5	23.0	24.0	21.0
YEAR	26.0	1.0										

03149200 MUSKINGUM RIVER AT PHILO, OHIO

LOCATION.--Lat 39°51'51", long 81°54'22", Muskingum County, on diversion canal on right bank of Muskingum River, 2,000 ft below canal headgates of Ohio Power Company Generating Division at Philo.

DRAINAGE AREA.--7,196 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1965 to September 1971.
Water temperatures: April 1965 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 2,130 micromhos Oct. 19; minimum, 340 micromhos Feb. 22-26.
pH: Maximum, 8.7 Dec. 7, Mar. 30, June 1, 5; minimum, 2.4 Sept. 24.
Dissolved oxygen: Maximum, 15.0 mg/l Nov. 30, Dec. 1, 3-14, 16-18, Jan. 21, Mar. 23-25, Apr. 3-8; minimum, 1.9 mg/l Aug. 10, 11.
Water temperatures: Maximum, 29.0°C June 30; minimum, 0.5°C Jan. 28, Feb. 1-3, 9-11.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.							
04...	1230	--	--	--	--	--	--
14...	0610	123	0	160	120	.4	6.9
19...	0614	119	0	140	510	.5	8.9
NOV.							
02...	0707	130	0	180	180	.4	6.4
05...	0650	115	0	120	53	.4	7.5
DEC.							
04...	0850	110	0	140	140	.3	7.9
26...	0710	90	0	120	39	.3	9.5
JAN.							
07...	0755	95	0	100	45	.3	9.5
25...	0705	126	0	180	110	.5	7.9
FEB.							
10...	0715	76	0	120	190	.3	9.8
26...	0700	50	0	77	32	.3	9.2
MAR.							
01...	0715	66	0	83	35	.3	9.2
29...	0700	100	0	140	140	.4	8.5
APR.							
03...	0940	114	0	150	82	.1	6.5
30...	0715	92	0	180	220	.3	2.2
MAY							
04...	0700	130	0	190	160	.6	5.3
10...	0713	76	0	89	33	.2	6.6
25...	0925	--	--	--	--	--	--
JUNE							
09...	0700	135	0	110	82	.4	8.7
30...	0700	122	0	110	200	.7	5.5
JULY							
16...	0712	90	0	190	400	.6	6.3
20...	0705	92	0	160	170	.4	4.2
AUG.							
25...	0705	122	0	170	340	.6	2.3
31...	0650	105	0	170	180	.5	3.7
SEP.							
08...	0725	120	0	160	180	.6	6.1
18...	0725	108	0	220	580	.6	4.9

03149200 MUSKINGUM RIVER AT PHILO, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance: Maximum, 2,130 micromhos Oct. 19, 1970; minimum, 170 micromhos Apr. 28, 1965.
pH: Maximum, 10.0 Jan. 1, 1969; minimum, 2.4 Sept. 24, 1971.
Dissolved oxygen (1965-67, 1970-71): Maximum, 15.0 mg/l on many days during 1966, 1967, 1970, and 1971; minimum, 1.9 mg/l Aug. 10, 11, 1971.
Water temperatures (1965-69, 1970-71): Maximum, 32.0°C July 26, 1969; minimum, freezing point on many days in 1967 to 1969.

REMARKS.--Continuous water-quality recorder operated since April 1965. Minimum recorded dissolved oxygen concentration of 1.5 mg/l occurred May 30, 1970. The recorder is located in the basement of the generating plant. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on a daily basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice a year to further refine the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.						
04...	--	--	--	--	8.0	1.2
14...	552	310	210	898	--	--
19...	1350	640	540	2040	--	--
NOV.						
02...	696	370	260	1130	--	--
05...	394	240	150	627	--	--
DEC.						
04...	608	310	220	879	--	--
26...	354	200	130	506	--	--
JAN.						
07...	338	190	110	509	--	--
25...	599	330	230	895	--	--
FEB.						
10...	562	300	240	956	--	--
26...	224	130	89	368	--	--
MAR.						
01...	250	150	96	411	--	--
29...	594	290	210	936	--	--
APR.						
03...	466	290	200	747	--	--
30...	776	410	330	1170	--	--
MAY						
04...	610	380	270	1060	--	--
10...	238	170	110	431	--	--
25...	--	--	--	--	9.0	1.4
JUNE						
09...	416	270	160	727	--	--
30...	652	370	270	1070	--	--
JULY						
16...	966	450	380	1560	--	--
20...	572	340	260	974	--	--
AUG.						
25...	976	450	350	1610	--	--
31...	690	370	280	1120	--	--
SEP.						
08...	636	320	220	1050	--	--
18...	1310	540	450	2000	--	--

03149200 MUSKINGUM RIVER AT PHILO, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1290	1070	1090	1020	740	710	690	640	990	890	430	380
2	1170	1040	1260	1070	780	700	700	660	990	860	440	400
3	1090	970	1200	720	740	630	700	640	960	860	450	420
4	1180	1050	720	640	890	680	710	600	940	800	470	440
5	1180	960	790	610	830	720	600	510	940	690	490	450
6	1040	980	790	630	770	700	580	550	690	600	540	460
7	1140	1020	770	700	710	630	570	530	640	600	560	450
8	1250	1140	830	720	760	660	560	510	600	490	500	450
9	1480	1240	850	760	820	740	610	530	930	470	490	450
10	1580	1420	850	730	770	710	650	590	980	930	480	440
11	1580	1380	890	760	740	690	680	630	1010	640	520	470
12	1380	1160	910	810	770	690	740	680	690	630	590	500
13	1250	900	890	810	700	590	790	720	750	690	600	500
14	1070	880	950	880	630	570	810	740	---	---	560	500
15	1190	1070	930	840	570	500	790	730	710	670	520	480
16	1190	1110	860	740	670	560	780	720	790	710	510	450
17	1190	1080	740	660	680	650	830	740	830	750	480	440
18	1360	1020	730	640	650	600	850	810	760	550	490	460
19	2130	1360	840	630	660	620	830	720	550	480	530	470
20	1860	940	900	820	680	660	760	720	560	480	540	490
21	950	860	840	730	680	660	790	730	530	360	540	520
22	1030	950	750	690	670	600	840	760	380	340	590	510
23	1180	1010	770	690	610	560	870	830	440	340	610	580
24	1200	1060	790	740	560	510	900	830	400	340	610	580
25	1180	1070	780	720	540	520	910	870	360	340	660	600
26	1280	1080	780	720	640	490	930	880	360	340	660	600
27	1420	1140	790	770	550	510	920	880	380	350	680	640
28	1400	1170	780	730	590	540	940	880	400	350	710	670
29	1440	1180	760	730	640	590	980	930	---	---	850	690
30	1360	1130	790	710	650	620	1050	960	---	---	930	690
31	1220	1080	---	---	660	620	1060	930	---	---	900	720
MONTH	2130	860	1260	610	890	490	1060	510	1010	340	930	380

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	910	740	1210	1030	990	940	1090	980	1340	1300	1420	1220
2	810	740	1120	1000	990	880	1110	960	1320	1260	1810	1400
3	780	730	1070	990	960	820	1060	990	1640	920	1950	1610
4	780	740	1070	1010	930	720	1030	950	1590	670	1610	1450
5	810	780	1120	1040	800	720	1140	1000	1440	1250	1480	1240
6	820	760	1120	900	840	760	1180	1100	1300	1180	1290	1210
7	790	730	910	480	850	720	1150	1080	1260	1170	1230	1020
8	820	740	490	420	760	660	1220	1130	1360	1230	1050	1000
9	860	780	490	420	780	630	1180	1000	1380	1290	1150	1050
10	910	810	440	410	760	660	1160	950	1320	1290	1320	1150
11	940	900	460	420	860	690	1200	1160	1350	1270	1330	1310
12	970	930	510	430	820	700	1210	1070	1390	1330	1390	1310
13	970	880	570	490	800	720	1180	1090	1460	1380	1490	1390
14	980	910	600	540	870	720	1220	1060	1420	1380	1490	1400
15	980	900	620	540	920	860	1550	1150	1400	1350	1620	1410
16	990	910	650	510	930	840	1580	1370	1450	1360	1690	1580
17	1020	900	640	580	960	840	1380	680	1390	1300	1940	1620
18	1040	990	630	580	980	880	980	600	1360	1290	2030	1660
19	1020	980	680	600	970	890	1030	920	1420	1310	1660	1600
20	1030	940	700	640	960	890	1020	840	1470	1380	1600	1180
21	1000	940	740	660	980	870	1010	950	1430	1340	1330	1160
22	1040	980	750	710	1020	910	1000	940	1400	1300	1680	1280
23	1090	1000	760	720	1040	940	1050	960	1460	1350	1670	1200
24	1300	1090	800	740	1070	970	1110	1040	1530	1400	1360	1110
25	1160	1030	810	740	1010	900	1200	1100	1630	1510	1330	1040
26	1130	1060	850	720	1020	940	1210	1010	1630	1460	1130	960
27	1100	1070	810	720	1060	950	1190	1050	1580	1480	1220	1030
28	1150	1080	800	720	1090	1000	1270	1190	1580	1490	1410	1220
29	1310	1150	---	---	1040	1000	1330	1250	1580	1430	1500	1220
30	1290	1090	---	---	1070	990	1420	1320	1490	1300	1700	1290
31	---	---	---	---	---	---	1380	1330	1320	1100	---	---
MONTH	1310	730	1210	410	1090	630	1580	600	1640	670	2030	960
YEAR	2130	340										

03149200 MUSKINGUM RIVER AT PHILO, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	7.1	6.4	7.6	7.1	6.4	5.9	8.0	6.8	7.8	7.2
2	---	---	7.1	6.5	7.6	7.1	6.9	5.9	8.2	7.7	8.0	7.6
3	---	---	7.0	6.6	7.8	7.2	7.2	6.7	8.6	7.6	8.2	7.7
4	---	---	7.1	6.6	7.7	7.1	7.1	6.7	8.5	7.6	8.1	7.5
5	---	---	7.1	6.8	7.8	6.7	7.2	6.8	8.1	7.2	8.2	7.8
6	---	---	7.1	6.6	7.7	7.1	7.2	6.7	8.0	7.8	7.9	7.3
7	---	---	7.2	6.7	8.7	6.9	7.2	6.5	8.0	7.8	7.6	7.3
8	---	---	7.3	7.0	8.1	6.9	7.1	6.5	8.2	7.7	7.9	7.2
9	---	---	7.3	6.2	7.8	6.5	6.9	6.4	8.3	7.6	7.9	7.5
10	---	---	7.0	6.0	7.8	6.6	6.7	6.1	8.1	7.6	7.8	7.6
11	---	---	7.0	6.4	7.5	6.9	6.9	6.2	8.4	7.8	7.8	7.4
12	---	---	7.0	6.3	7.4	6.9	7.0	6.3	8.5	8.2	7.8	7.6
13	---	---	7.0	6.2	6.9	6.5	7.0	6.5	8.3	7.7	7.8	7.6
14	---	---	7.1	6.5	7.3	6.6	7.0	6.5	---	---	7.8	7.6
15	---	---	7.0	6.3	7.5	7.0	6.8	6.3	8.5	7.9	7.9	7.5
16	---	---	---	---	---	---	7.0	6.2	8.4	8.1	7.7	7.3
17	---	---	---	---	---	---	7.2	6.5	8.3	7.9	7.7	7.5
18	---	---	---	---	---	---	7.6	6.6	8.2	7.8	7.7	7.4
19	---	---	---	---	---	---	7.5	7.2	8.2	7.8	7.9	7.7
20	---	---	---	---	---	---	7.5	6.9	7.9	7.5	7.8	7.6
21	7.3	7.2	---	---	---	---	7.4	7.1	7.9	7.3	7.8	7.4
22	7.2	6.6	---	---	---	---	7.6	7.1	7.8	7.1	7.9	7.5
23	7.7	6.4	---	---	---	---	7.4	7.0	7.6	6.8	7.9	7.5
24	7.7	6.6	---	---	---	---	7.3	7.0	7.1	6.9	7.7	7.4
25	7.3	6.4	---	---	---	---	7.7	7.3	7.2	6.8	8.0	7.6
26	7.6	6.5	---	---	---	---	7.6	7.1	7.6	7.1	8.0	7.3
27	7.6	6.4	---	---	---	---	7.5	7.0	7.6	7.2	7.9	7.4
28	7.3	6.4	---	---	---	---	7.4	6.7	7.5	7.1	7.9	6.7
29	7.3	6.5	---	---	---	---	7.4	6.5	---	---	8.1	6.6
30	7.2	6.3	7.6	7.0	7.1	6.7	7.6	7.0	---	---	8.7	6.8
31	6.9	6.3	---	---	7.2	6.1	7.4	7.0	---	---	8.2	6.5
MONTH	---	---	---	---	---	---	7.7	5.9	8.6	6.8	8.7	6.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	6.4	8.0	6.8	8.7	8.0	---	---	---	6.3	6.9	6.7
2	8.2	7.3	8.1	6.7	8.6	8.1	---	---	---	6.3	6.9	6.7
3	8.2	7.9	8.4	8.1	8.5	8.0	---	---	---	6.4	6.9	6.6
4	8.2	8.1	8.6	8.3	8.6	8.0	---	---	---	6.5	6.9	6.7
5	8.3	8.0	8.6	8.3	8.7	8.4	---	---	7.0	6.6	6.9	6.6
6	8.2	8.1	8.3	7.5	8.4	7.7	---	---	7.1	6.7	6.9	6.8
7	8.3	8.0	7.9	7.7	7.7	7.2	8.3	7.2	7.5	6.7	7.0	6.7
8	8.3	8.1	7.9	7.5	7.7	7.3	8.4	6.8	7.0	6.6	6.9	6.7
9	8.2	8.0	7.9	7.7	7.6	7.4	8.0	6.7	7.1	6.6	6.8	6.4
10	8.3	8.1	7.9	7.7	7.4	7.3	7.2	6.7	6.8	6.5	6.9	6.7
11	8.2	8.1	7.9	7.7	7.6	7.3	6.9	6.5	7.1	6.1	7.4	6.9
12	8.1	7.9	7.8	7.7	7.7	7.4	7.1	6.6	7.1	6.1	7.9	7.4
13	8.3	8.0	7.9	7.7	7.7	7.5	7.2	6.8	6.6	5.9	7.9	6.9
14	8.4	8.1	7.7	7.6	7.7	7.5	7.1	6.8	6.5	5.8	6.9	6.6
15	8.6	8.2	7.8	7.6	8.2	7.2	7.4	6.9	7.1	6.3	6.6	6.5
16	8.6	8.3	7.8	7.7	8.0	7.4	---	6.8	6.9	6.6	6.8	6.6
17	8.5	8.3	7.7	7.6	8.0	7.7	---	7.2	7.4	6.7	6.9	6.8
18	8.4	8.1	7.8	7.6	8.2	7.5	---	7.0	7.2	6.7	6.9	6.7
19	8.4	8.1	7.8	7.6	7.6	7.1	---	6.8	7.6	6.8	6.9	6.7
20	8.4	8.1	7.8	7.4	7.2	7.2	---	6.8	7.4	6.9	7.1	6.7
21	8.4	8.1	7.8	7.6	7.2	7.2	---	5.8	6.9	6.7	7.0	6.2
22	8.4	8.1	7.9	7.6	7.3	7.2	---	6.4	6.9	6.6	7.4	6.3
23	8.4	8.1	8.0	7.7	7.5	7.2	---	6.2	6.9	6.5	8.0	3.2
24	8.4	8.2	7.9	7.7	7.6	7.2	---	6.1	6.9	6.5	8.2	2.4
25	8.5	8.3	7.9	7.5	7.7	7.3	6.5	6.1	6.9	6.6	7.8	6.8
26	8.5	8.1	7.7	7.3	7.6	7.0	6.3	5.9	6.9	6.7	7.7	6.9
27	8.5	8.3	7.8	7.4	7.1	6.9	6.5	6.1	6.8	6.4	7.6	7.2
28	8.4	8.1	7.8	7.6	---	---	6.5	6.2	6.7	6.4	7.7	6.6
29	8.3	7.2	---	---	---	---	6.5	6.1	6.8	6.7	8.6	6.5
30	7.9	6.7	---	---	---	---	6.8	5.9	6.9	6.6	8.0	7.1
31	---	---	---	---	---	---	6.4	6.2	6.8	6.7	---	---
MONTH	8.6	6.4	8.6	6.7	8.7	6.9	---	5.8	7.6	5.8	8.6	2.4
YEAR	8.7	2.4										

03149200 MUSKINGUM RIVER AT PHILO, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	10.1	9.3	15.0	12.3	10.1	9.3	14.3	10.5	12.0	10.0
2	---	---	10.8	9.4	13.9	12.4	12.5	8.7	14.6	8.7	12.2	9.9
3	---	---	10.7	9.2	15.0	13.2	11.1	8.9	14.0	8.3	12.2	11.4
4	---	---	10.6	8.9	15.0	13.3	10.5	8.9	14.2	10.6	12.6	11.9
5	---	---	10.5	9.5	15.0	13.5	10.5	10.0	13.9	8.6	12.3	11.2
6	---	---	10.5	9.7	15.0	14.1	13.2	10.5	11.4	9.9	12.2	10.5
7	---	---	11.2	9.3	15.0	13.7	13.6	10.7	11.6	11.0	11.9	10.1
8	---	---	11.6	10.5	15.0	13.8	14.2	10.8	11.6	9.5	12.8	11.1
9	---	---	11.5	9.6	15.0	13.7	14.7	11.2	11.5	10.1	13.3	11.9
10	---	---	12.5	10.9	15.0	13.6	13.2	11.2	11.6	10.2	13.0	11.2
11	---	---	10.9	8.7	15.0	13.7	13.2	11.6	14.4	11.3	12.8	11.1
12	---	---	10.9	9.5	15.0	14.2	13.3	11.7	12.8	11.1	13.9	12.6
13	---	---	11.7	10.2	15.0	14.0	12.8	11.6	12.5	10.9	13.5	12.5
14	---	---	12.5	9.4	15.0	13.9	12.6	11.2	---	---	12.7	11.9
15	---	---	10.8	10.2	14.9	14.1	11.7	9.0	14.3	11.6	12.9	10.7
16	---	---	12.6	10.5	15.0	14.1	12.7	8.0	12.5	10.4	12.8	12.0
17	---	---	13.3	11.0	15.0	14.2	11.0	8.8	12.1	11.4	13.4	11.8
18	---	---	12.7	12.0	15.0	14.8	12.0	8.9	13.2	9.8	13.5	11.9
19	---	---	12.6	11.5	---	---	12.3	11.5	14.4	10.3	13.5	12.6
20	---	---	13.5	11.6	---	---	11.7	8.9	13.7	11.3	13.9	12.1
21	10.2	9.6	13.6	13.0	---	---	15.0	10.8	13.6	11.8	14.2	13.2
22	9.8	5.5	14.9	12.8	---	---	12.4	10.4	13.6	11.5	14.2	13.2
23	8.8	4.5	13.6	12.4	---	---	14.5	10.4	12.5	11.5	15.0	12.6
24	9.4	4.6	14.8	12.5	---	---	12.9	9.8	13.4	11.6	15.0	13.0
25	9.6	9.2	14.1	12.7	---	---	10.9	9.3	13.3	10.2	15.0	14.1
26	10.3	8.8	13.9	12.9	---	---	11.5	9.2	12.3	10.0	14.8	12.8
27	10.2	9.4	14.1	12.6	---	---	11.4	10.1	12.2	9.6	14.1	13.6
28	10.3	9.2	14.7	12.6	---	---	11.5	10.7	12.1	10.0	14.1	13.2
29	10.2	9.2	14.9	14.4	---	---	13.3	10.0	---	---	14.0	13.0
30	9.6	9.1	15.0	12.4	10.9	8.6	14.5	10.1	---	---	13.4	8.7
31	10.6	9.2	---	---	11.1	8.5	13.4	10.2	---	---	10.8	7.8
MONTH	---	---	15.0	8.7	---	---	15.0	8.0	14.6	8.3	15.0	7.8

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.4	7.0	12.0	11.7	13.7	9.6	5.6	3.9	6.3	4.2	10.4	8.4
2	14.0	5.9	13.0	11.3	12.2	4.4	5.9	4.1	9.1	4.3	9.9	3.6
3	15.0	7.7	12.6	11.6	8.8	4.4	5.9	5.6	9.1	6.7	8.9	4.8
4	15.0	15.0	13.5	12.3	8.6	6.0	7.4	5.5	7.1	5.7	8.1	4.3
5	15.0	9.4	13.2	8.0	8.7	7.3	6.8	5.6	8.1	4.6	7.5	3.6
6	15.0	10.4	14.6	7.4	8.2	5.3	7.2	5.5	9.1	7.0	6.2	3.6
7	15.0	11.3	13.0	6.3	7.6	3.8	7.1	6.0	9.6	6.9	7.4	3.5
8	15.0	10.6	13.2	11.4	6.9	6.4	7.1	6.0	8.4	2.9	7.6	3.7
9	14.9	13.5	13.1	11.7	8.9	6.6	6.2	5.0	8.3	3.7	7.7	7.1
10	14.2	8.3	13.7	8.6	8.0	7.4	6.3	3.5	6.7	1.9	7.5	6.7
11	10.4	5.5	11.8	10.8	7.8	5.7	6.3	3.4	5.1	1.9	7.2	4.0
12	13.6	8.4	12.3	10.7	8.0	6.5	6.9	4.9	4.7	3.2	4.2	4.1
13	13.7	7.8	12.2	9.8	7.8	6.5	7.6	5.8	4.1	2.3	7.1	4.1
14	14.4	9.4	12.8	9.8	8.4	6.1	7.4	5.3	2.7	2.2	7.4	6.6
15	13.2	6.6	12.4	10.2	7.9	5.8	9.7	5.9	2.7	2.5	7.2	6.7
16	12.7	6.6	12.1	10.3	8.5	6.4	10.4	7.3	4.8	2.6	7.6	7.0
17	10.8	6.1	11.6	7.0	8.7	6.9	8.5	7.1	7.1	2.8	7.1	6.5
18	12.9	7.6	11.2	7.2	8.7	7.5	8.9	6.7	7.0	4.7	7.5	7.0
19	13.0	8.4	11.0	6.3	8.4	6.7	7.1	4.6	8.0	5.3	8.2	6.4
20	12.9	8.1	10.8	7.0	7.6	6.4	7.3	4.7	9.9	5.3	9.3	5.9
21	13.4	7.6	11.6	9.5	7.7	4.8	5.9	3.8	9.0	6.1	6.6	5.3
22	13.0	9.2	11.7	8.7	7.5	5.2	7.0	3.6	8.3	5.5	7.8	6.0
23	13.3	7.3	11.8	9.4	5.2	3.4	6.1	3.9	7.6	4.7	9.8	5.0
24	12.8	8.0	11.9	7.6	5.9	3.5	5.3	3.0	8.2	4.8	6.0	4.7
25	12.1	7.1	10.3	5.9	6.1	3.8	3.3	2.9	7.0	4.2	6.0	5.4
26	12.5	6.5	11.0	8.4	5.0	3.5	5.5	3.3	5.2	4.3	6.0	5.1
27	12.3	8.7	10.6	7.0	5.2	3.2	7.1	4.3	5.0	3.0	5.5	5.1
28	12.0	6.3	11.3	8.2	5.6	3.5	6.1	3.4	6.9	4.0	5.9	5.4
29	11.5	6.0	---	---	4.3	2.9	7.1	3.6	8.3	5.8	5.7	5.2
30	12.4	10.3	---	---	6.9	3.0	8.6	3.6	11.5	5.1	5.5	5.2
31	---	---	---	---	---	---	5.5	4.3	11.1	8.4	---	---
MONTH	15.0	5.5	14.6	5.9	13.7	2.9	10.4	2.9	11.5	1.9	10.4	3.5
YEAR	15.0	1.9										

03149200 MUSKINGUM RIVER AT PHILO, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	19.0	16.0	15.5	9.5	7.5	2.5	2.0	1.0	0.5	5.0	4.0
2	20.0	19.0	15.5	15.0	8.5	8.0	2.0	1.5	1.0	0.5	5.0	4.5
3	19.5	18.5	15.0	13.5	9.0	8.0	3.0	2.0	1.5	0.5	5.0	3.5
4	18.5	18.0	13.5	13.0	9.5	8.5	4.0	3.0	2.0	1.0	3.5	3.0
5	19.0	18.0	13.0	12.0	9.0	7.5	4.5	3.5	3.0	1.5	3.5	2.5
6	19.0	16.5	12.0	11.5	7.5	5.0	4.0	3.0	2.0	1.5	4.0	3.0
7	17.5	16.5	12.0	11.5	5.0	4.0	3.0	1.0	3.5	2.0	4.0	3.5
8	19.5	16.5	11.5	11.0	4.5	4.0	2.0	1.0	2.0	1.0	4.0	2.5
9	19.0	18.0	11.5	11.0	4.5	4.0	1.5	1.0	1.0	0.5	3.0	2.0
10	19.0	18.0	11.5	11.0	6.0	4.0	2.0	1.0	1.0	0.5	3.0	2.5
11	18.5	18.0	12.5	11.5	6.0	4.5	2.0	1.5	1.5	0.5	3.5	3.0
12	19.0	18.5	13.0	12.0	7.0	6.0	3.0	2.0	2.5	1.0	5.0	3.0
13	19.0	18.5	12.5	12.0	7.0	6.0	3.0	2.5	2.0	1.5	6.0	4.5
14	19.0	18.5	12.0	11.5	6.0	5.0	3.5	3.0	---	---	6.5	5.0
15	19.0	17.5	11.5	10.5	5.0	4.5	3.5	3.0	1.5	1.0	8.0	6.5
16	17.5	14.5	10.5	9.0	5.0	4.5	4.0	2.5	2.0	1.5	8.0	7.0
17	15.0	14.0	10.0	9.0	5.0	4.0	3.0	2.0	2.5	2.0	7.0	6.0
18	14.5	14.0	9.0	8.5	4.5	4.0	2.0	1.5	2.5	1.5	6.5	5.5
19	15.0	14.5	9.0	8.0	5.0	4.0	1.5	1.0	4.0	2.0	5.5	5.0
20	15.0	14.5	9.0	8.5	5.5	5.0	1.5	1.0	4.0	3.0	5.0	4.5
21	15.0	13.5	8.5	8.0	5.0	4.5	1.5	1.0	4.0	2.5	5.0	4.0
22	15.0	14.0	8.5	8.0	5.0	4.5	2.0	1.5	4.5	3.0	5.0	4.5
23	15.0	13.0	8.0	5.5	5.5	5.0	2.5	2.0	4.5	4.0	5.5	4.5
24	14.0	13.0	6.0	5.0	5.0	4.0	3.0	2.5	4.0	3.0	5.0	4.0
25	15.5	14.0	5.0	4.0	4.0	3.0	3.5	3.0	3.5	2.5	5.5	4.0
26	16.0	15.5	5.0	4.0	3.5	2.5	4.5	2.0	4.0	3.0	5.0	4.5
27	16.0	15.5	6.0	5.0	3.5	2.5	2.0	1.0	4.5	4.0	7.0	5.5
28	16.0	15.0	6.0	5.5	2.5	2.0	1.5	0.5	5.0	4.0	7.5	6.5
29	15.5	15.5	6.5	6.0	2.5	1.5	1.5	1.0	---	---	8.0	7.5
30	15.5	15.5	8.0	6.5	2.5	1.5	1.5	1.0	---	---	8.0	7.0
31	16.0	15.5	---	---	2.5	2.0	1.5	1.0	---	---	8.5	7.5
MONTH	20.0	13.0	16.0	4.0	9.5	1.5	4.5	0.5	5.0	0.5	8.5	2.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	8.0	13.5	12.0	21.0	19.5	28.5	28.0	23.0	19.5	24.5	24.0
2	11.5	8.0	13.5	13.0	21.5	20.5	28.0	27.0	24.5	21.5	24.5	24.0
3	11.5	8.0	13.0	12.5	22.5	21.5	27.0	26.0	25.5	23.0	25.0	24.5
4	9.0	8.0	13.0	11.5	23.5	22.[illegible]	27.0	25.5	25.0	24.5	25.5	24.5
5	11.0	8.5	15.0	13.0	24.0	23.0	26.5	25.0	24.5	21.5	26.0	24.0
6	9.5	8.0	17.0	13.5	24.5	24.0	26.5	25.5	25.0	23.5	26.0	23.5
7	11.0	7.0	15.5	13.0	24.0	23.0	26.5	26.0	25.5	24.5	26.0	24.0
8	11.5	8.0	15.0	13.0	24.0	22.5	28.0	26.5	24.5	19.5	25.5	24.0
9	10.5	9.0	16.0	13.5	23.0	20.5	28.0	27.5	25.5	21.0	26.0	25.0
10	13.0	10.0	15.0	14.0	23.0	20.0	28.0	27.0	26.0	24.5	25.5	25.0
11	17.0	12.5	15.5	14.5	23.0	19.5	28.0	27.0	26.5	24.5	25.5	24.0
12	17.0	11.5	15.0	14.5	23.5	23.0	27.0	26.5	26.5	24.5	24.0	23.0
13	15.0	12.5	15.0	14.0	23.5	23.0	27.0	26.0	24.5	20.5	24.0	22.0
14	14.5	13.0	14.5	13.5	24.0	23.0	26.5	25.0	25.0	20.5	24.0	23.0
15	14.0	13.0	15.5	14.0	24.5	22.5	27.0	24.0	26.0	22.5	24.0	23.0
16	14.5	13.0	17.0	15.0	25.0	23.5	26.5	25.5	25.5	23.0	23.5	22.5
17	15.0	13.5	18.5	16.5	24.5	23.5	26.0	25.0	26.5	21.0	22.5	21.0
18	18.0	14.0	19.5	18.0	25.0	23.5	27.0	25.5	26.5	25.5	21.5	21.0
19	17.0	14.5	18.0	16.0	25.5	24.5	26.5	25.5	27.0	26.0	21.0	21.0
20	19.5	14.5	18.0	17.5	27.0	25.0	25.5	25.0	26.0	25.5	21.0	20.5
21	16.5	15.0	18.5	17.5	27.0	26.0	25.0	24.0	26.0	25.5	21.0	20.5
22	15.0	13.5	18.5	18.0	27.0	26.0	26.5	24.5	26.5	25.5	21.0	20.0
23	15.0	13.0	18.5	18.0	26.5	24.5	26.0	25.0	26.0	25.5	21.0	20.0
24	14.0	13.0	19.0	18.5	27.0	22.5	26.0	25.5	25.5	24.5	20.5	19.5
25	15.5	13.0	19.5	18.5	27.0	26.0	26.0	25.5	26.0	24.5	20.5	18.5
26	15.5	14.0	19.0	17.5	27.0	25.5	26.0	25.0	25.5	25.0	22.0	20.0
27	14.0	13.0	17.5	17.0	26.5	25.5	25.5	24.5	25.0	24.5	21.5	21.0
28	15.0	12.0	---	16.5	27.5	25.5	24.5	23.5	24.5	24.0	23.0	21.5
29	13.0	12.0	---	---	27.5	26.0	24.0	22.0	24.5	24.0	23.5	22.0
30	13.0	12.0	---	---	29.0	28.5	23.5	20.0	25.0	22.5	23.0	22.5
31	---	---	---	---	---	---	22.0	21.0	24.5	24.0	---	---
MONTH	19.5	7.0	19.5	11.5	29.0	19.5	28.5	20.0	27.0	19.5	26.0	18.5
YEAR	29.0	0.5										

03159510 HOCKING RIVER BELOW ATHENS, OHIO

LOCATION.--Lat 39°19'39", long 82°00'18", Athens County, at Harmony Lane Bridge, 5.5 miles downstream from gaging station at Athens.

DRAINAGE AREA.--957 sq mi.

PERIOD OF RECORD.--Chemical analyses: May 1966 to September 1971.
Water temperatures: May 1966 to September 1971.

EXTREMES.--Period of record:
Specific conductance (1966-67, 1968-69): Maximum, 1,500 micromhos or greater July 12, 1966, Oct. 3, 1968; minimum, 140 micromhos July 13, 1966, Mar. 5, 1967.
Dissolved oxygen (1968-69): Maximum, 13.7 mg/l Feb. 19, 1969; minimum, 2.6 mg/l Jan. 27, 1969.
Water temperatures (1966-69): Maximum, 32.0°C Aug. 5, 30, 1969; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since May 1966. Maximum recorded dissolved oxygen concentration of 13.9 mg/l occurred Dec. 27, 1966. Minimum recorded dissolved oxygen concentration of 0.4 mg/l occurred June 9, 1966. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for 03159500 Hocking River at Athens, Ohio (drainage area 943 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT.												
11...	1000	385	92	0	150	54	.3	3.8	390	220	622	7.0
25...	1100	305	106	0	210	110	.3	4.7	598	330	928	7.5
NOV.												
15...	1000	691	110	0	170	85	.3	5.1	492	290	793	8.0
18...	1500	761	84	0	140	74	.2	8.0	394	240	664	7.9
DEC.												
11...	1600	380	108	0	200	92	.1	5.2	532	310	845	7.2
13...	1100	3520	69	0	140	83	.2	4.7	406	230	650	7.6
JAN.												
17...	1800	1240	66	0	140	50	.1	4.9	362	200	546	7.5
31...	1800	465	98	0	220	71	.2	3.8	528	290	773	7.8
FEB.												
15...	1300	2100	45	0	120	44	.2	4.8	312	160	458	7.3
21...	1100	3800	52	0	96	36	.1	5.6	274	140	399	6.9
MAR.												
13...	1900	3660	57	0	110	42	.2	5.3	276	180	481	7.5
28...	1300	922	67	0	180	52	.3	4.4	420	260	667	7.4
APR.												
04...	1700	628	76	0	210	57	.2	3.6	452	280	721	7.4
29...	1200	352	87	0	260	72	.2	2.1	602	350	880	7.0
MAY												
02...	1100	302	92	0	250	74	.3	3.0	604	340	875	7.7
09...	1700	5000	38	0	94	28	.2	6.5	232	140	385	6.6
JUNE												
15...	1200	730	70	0	170	82	.3	5.0	478	280	778	7.8
24...	1130	197	103	0	280	76	.4	7.7	650	380	991	7.8
JULY												
11...	1800	266	110	0	250	80	.3	3.1	580	360	894	8.0
25...	1200	340	102	0	290	89	.3	4.2	642	400	982	7.3
AUG.												
09...	1145	165	98	0	220	96	.3	2.9	566	340	884	7.2
22...	1200	76	100	0	320	110	.3	2.1	752	440	1120	7.9
SEP.												
05...	1300	121	88	0	250	84	.3	5.4	596	330	933	7.8
28...	1230	141	96	0	300	120	.3	10	746	420	1150	7.8

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.								
03...	5.0	0	1	8	0	0	.2	170
JUNE								
15...	5.0	0	--	--	--	--	1.0	--

03159510 HOCKING RIVER BELOW ATHENS, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25 °C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	786	640	797	723	777	682	---	---	---	---	---	---
2	816	755	776	689	806	760	---	---	---	---	---	---
3	1020	663	782	573	834	764	---	---	---	---	---	---
4	674	630	764	591	845	770	---	---	---	---	---	---
5	671	633	674	635	821	764	---	---	---	---	---	---
6	675	609	695	659	833	788	---	---	---	---	---	---
7	680	623	732	694	822	780	---	---	---	---	---	---
8	692	615	788	732	840	801	---	---	---	---	---	---
9	676	612	806	758	843	795	---	---	---	---	---	---
10	656	604	816	770	861	804	---	---	---	---	---	---
11	630	596	818	771	855	821	---	---	---	---	---	---
12	698	614	813	776	---	---	---	---	---	---	522	500
13	854	671	827	771	---	---	---	---	---	---	538	468
14	950	822	830	777	---	---	---	---	---	---	468	441
15	864	669	803	723	---	---	---	---	---	---	507	467
16	875	723	806	597	---	---	---	---	---	---	520	456
17	902	824	699	606	---	---	---	---	---	---	501	456
18	858	786	689	662	---	---	---	---	---	---	555	501
19	893	847	728	675	---	---	---	---	---	---	596	476
20	957	870	737	705	---	---	---	---	---	---	602	420
21	935	881	740	684	---	---	---	---	---	---	608	580
22	891	809	765	719	---	---	---	---	---	---	640	605
23	861	821	737	704	---	---	---	---	---	---	663	584
24	923	854	777	719	---	---	---	---	---	---	658	610
25	950	882	810	606	---	---	---	---	---	---	676	633
26	935	873	635	561	---	---	---	---	---	---	685	657
27	957	906	638	603	---	---	---	---	---	---	691	657
28	993	926	651	596	---	---	---	---	---	---	682	658
29	972	905	656	596	---	---	---	---	---	---	689	666
30	911	596	711	627	---	---	---	---	---	---	690	663
31	723	557	---	---	---	---	---	---	---	---	768	656
MONTH	1020	557	830	561	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	740	605	941	893	898	844	838	801	978	931	885	729
2	746	613	935	666	918	866	850	801	1010	937	838	705
3	751	716	938	685	940	847	879	799	1030	736	1020	743
4	753	714	835	818	937	877	909	847	877	277	964	824
5	782	725	930	744	963	873	965	883	823	546	947	806
6	787	745	807	443	951	889	997	936	814	732	908	709
7	792	759	606	348	1180	928	991	942	813	786	955	772
8	805	768	---	---	974	846	988	934	852	802	1090	657
9	824	767	492	382	945	864	1000	952	952	838	1140	982
10	811	777	444	402	1010	880	1020	960	967	870	1170	1010
11	829	786	493	443	997	866	1020	850	966	894	1170	1010
12	841	798	860	305	992	909	1000	963	986	926	1130	1020
13	836	770	551	514	977	668	1010	930	1030	962	1220	1000
14	855	811	540	506	1000	722	1010	982	1110	1030	1120	960
15	854	817	575	528	1030	777	982	837	1070	961	1110	931
16	849	814	605	557	817	745	903	738	1150	925	1080	880
17	868	814	615	570	780	709	936	894	1140	951	1170	928
18	862	826	647	585	868	717	965	895	1140	982	1100	1030
19	896	838	662	628	876	838	927	907	1210	1020	1090	1020
20	908	869	696	629	933	873	964	913	1150	1020	---	---
21	884	782	765	676	967	913	978	964	1160	1010	---	---
22	921	857	763	709	1020	942	---	---	1200	1050	---	---
23	907	860	789	749	1030	967	---	---	1180	1060	---	---
24	918	858	826	776	1050	993	---	---	1180	1000	---	---
25	915	864	828	780	1050	967	1050	979	1110	816	---	---
26	916	868	849	799	1020	793	1340	1010	1130	930	1020	971
27	927	864	805	748	967	534	1310	1070	1120	1040	1050	1020
28	915	768	776	731	696	534	1090	957	1120	881	1150	897
29	950	876	836	741	765	601	985	793	909	825	1080	887
30	945	899	866	809	816	733	996	913	825	761	1200	882
31	---	---	873	830	---	---	990	921	914	768	---	---
MONTH	950	605	941	305	1180	534	1340	738	1210	277	1220	657

03159510 HOCKING RIVER BELOW ATHENS, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.2	8.6	8.4	10.3	9.8	---	---	---	---	---	---
2	8.5	8.2	8.6	8.4	10.3	9.8	---	---	---	---	---	---
3	8.5	8.2	8.6	8.4	10.1	9.8	---	---	---	---	---	---
4	8.6	8.3	8.6	8.5	10.1	9.5	---	---	---	---	---	---
5	8.6	8.3	8.6	8.5	10.1	10.0	---	---	---	---	---	---
6	8.7	8.4	8.8	8.5	10.2	10.0	---	---	---	---	---	---
7	8.7	8.4	8.8	8.4	10.6	10.2	---	---	---	---	---	---
8	8.6	8.3	8.9	8.5	10.9	10.3	---	---	---	---	---	---
9	8.4	8.3	8.8	8.5	11.1	10.6	---	---	---	---	---	---
10	8.4	8.3	8.7	8.2	11.1	10.8	---	---	---	---	---	---
11	8.5	8.3	8.6	9.5	12.0	9.0	---	---	---	---	---	---
12	8.5	8.3	8.6	8.5	---	---	---	---	---	---	12.9	12.7
13	8.6	8.4	8.6	8.4	---	---	---	---	---	---	13.0	12.3
14	8.6	8.4	8.6	8.4	---	---	---	---	---	---	12.5	11.9
15	8.5	8.4	8.5	8.2	---	---	---	---	---	---	12.6	12.0
16	8.7	8.5	9.8	8.4	---	---	---	---	---	---	12.5	11.7
17	8.8	8.5	9.3	8.9	---	---	---	---	---	---	12.2	11.6
18	8.7	8.4	9.3	8.9	---	---	---	---	---	---	12.5	11.9
19	8.7	8.3	9.2	8.9	---	---	---	---	---	---	12.5	11.4
20	8.5	8.4	9.1	8.7	---	---	---	---	---	---	12.3	9.5
21	8.5	8.4	8.8	8.5	---	---	---	---	---	---	12.2	11.8
22	8.6	8.4	8.7	8.5	---	---	---	---	---	---	12.3	11.9
23	8.5	8.4	8.8	8.3	---	---	---	---	---	---	12.3	10.6
24	8.6	8.4	9.4	8.7	---	---	---	---	---	---	12.3	11.6
25	8.7	8.5	9.8	9.3	---	---	---	---	---	---	12.4	11.8
26	8.7	8.4	10.0	9.7	---	---	---	---	---	---	12.3	11.9
27	8.7	8.4	10.1	10.0	---	---	---	---	---	---	12.3	11.7
28	8.6	8.4	10.2	9.6	---	---	---	---	---	---	12.0	11.8
29	8.6	8.4	9.9	9.6	---	---	---	---	---	---	12.0	11.8
30	8.4	8.3	10.0	9.6	---	---	---	---	---	---	11.9	11.4
31	8.5	8.3	---	---	---	---	---	---	---	---	12.5	11.2
MONTH	8.8	8.2	10.2	8.2	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.1	10.6	10.2	9.6	7.0	5.8	---	---	---	---	---	---
2	11.8	9.7	10.4	7.6	6.2	5.3	---	---	---	---	---	---
3	11.8	11.4	10.9	6.4	6.3	5.4	---	---	---	---	---	---
4	11.8	11.2	11.1	9.0	6.3	5.5	---	---	---	---	---	---
5	11.9	11.2	11.0	6.2	6.5	5.1	---	---	---	---	---	---
6	12.0	11.3	9.8	7.0	6.6	5.2	---	---	---	---	---	---
7	11.9	11.3	8.9	6.1	7.2	5.4	---	---	---	---	---	---
8	11.7	11.2	---	---	7.0	5.9	---	---	---	---	---	---
9	11.7	11.1	7.4	7.2	7.5	6.2	---	---	---	---	---	---
10	11.7	11.1	8.2	7.4	8.5	7.0	---	---	---	---	---	---
11	11.6	11.0	9.0	5.6	8.3	6.9	---	---	---	---	---	---
12	11.6	11.0	9.1	5.5	8.0	6.7	---	---	---	---	---	---
13	11.5	10.5	6.4	5.6	7.9	7.3	---	---	---	---	---	---
14	11.6	10.9	7.5	6.3	7.7	6.6	---	---	---	---	---	---
15	11.5	10.8	7.6	6.0	7.8	6.5	---	---	---	---	---	---
16	11.2	10.7	7.5	5.7	6.6	5.1	---	---	---	---	---	---
17	11.4	10.6	6.6	5.8	5.7	4.5	---	---	---	---	---	---
18	11.1	10.4	6.2	5.4	5.4	4.0	---	---	---	---	---	---
19	11.2	10.4	6.2	5.4	4.7	2.9	---	---	---	---	---	---
20	11.1	10.4	6.1	5.6	4.4	2.3	---	---	---	---	---	---
21	10.7	9.5	6.3	5.5	4.2	1.6	---	---	---	---	---	---
22	10.9	10.0	6.5	5.9	6.1	0.6	---	---	---	---	---	---
23	10.6	9.9	6.8	6.2	6.5	1.7	---	---	---	---	---	---
24	10.4	9.6	6.6	6.0	6.6	1.4	---	---	---	---	---	---
25	10.2	9.4	6.5	6.2	7.5	1.1	---	---	---	---	---	---
26	10.0	9.3	6.9	6.6	---	---	---	---	---	---	---	---
27	10.6	9.1	7.0	6.7	---	---	---	---	---	---	---	---
28	9.3	7.6	7.0	6.0	---	---	---	---	---	---	9.4	6.9
29	9.6	8.7	6.7	5.8	---	---	---	---	---	---	7.5	5.2
30	9.9	9.3	7.1	5.9	---	---	---	---	---	---	7.6	4.8
31	---	---	7.1	6.3	---	---	---	---	---	---	---	---
MONTH	12.1	7.6	11.1	5.4	8.5	0.6	---	---	---	---	---	---

03159510 HOCKING RIVER BELOW ATHENS, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	16.0	15.0	14.0	11.0	8.5	---	---	---	---	---	---
2	19.0	16.0	14.5	14.0	10.5	9.0	---	---	---	---	---	---
3	18.5	16.0	14.0	11.5	10.0	9.0	---	---	---	---	---	---
4	18.5	15.5	12.0	10.0	10.5	7.5	---	---	---	---	---	---
5	18.5	15.0	10.5	10.0	8.0	7.0	---	---	---	---	---	---
6	18.0	15.0	11.0	9.5	7.0	5.0	---	---	---	---	---	---
7	18.5	15.5	11.5	9.5	5.0	4.0	---	---	---	---	---	---
8	19.0	16.5	11.5	9.5	4.5	2.5	---	---	---	---	---	---
9	19.5	17.5	11.5	9.5	4.5	2.5	---	---	---	---	---	---
10	20.0	17.0	12.0	10.0	5.0	3.0	---	---	---	---	---	---
11	18.5	17.5	12.0	11.0	5.0	4.0	---	---	---	---	---	---
12	19.0	17.0	12.0	11.5	---	---	---	---	---	---	5.0	4.0
13	19.5	17.5	12.0	11.5	---	---	---	---	---	---	7.0	5.0
14	20.0	17.5	12.0	11.0	---	---	---	---	---	---	8.0	7.0
15	18.5	17.0	11.5	9.0	---	---	---	---	---	---	10.5	8.0
16	17.0	15.0	9.0	7.5	---	---	---	---	---	---	10.5	9.5
17	15.5	13.0	7.5	6.5	---	---	---	---	---	---	9.5	6.5
18	15.0	12.0	6.5	6.0	---	---	---	---	---	---	6.5	5.5
19	14.5	11.0	7.0	6.0	---	---	---	---	---	---	6.5	5.5
20	13.5	11.5	8.0	6.5	---	---	---	---	---	---	6.0	5.0
21	13.0	12.0	8.0	7.0	---	---	---	---	---	---	6.0	4.0
22	15.0	12.0	7.0	7.0	---	---	---	---	---	---	6.0	5.0
23	14.5	12.5	7.0	5.0	---	---	---	---	---	---	6.0	5.0
24	14.5	13.0	5.0	2.0	---	---	---	---	---	---	6.0	4.5
25	15.0	13.0	3.0	1.5	---	---	---	---	---	---	6.0	4.0
26	15.0	13.0	3.5	2.5	---	---	---	---	---	---	6.0	4.5
27	15.5	13.5	5.5	3.5	---	---	---	---	---	---	8.0	5.5
28	15.0	13.5	7.0	5.5	---	---	---	---	---	---	10.0	7.0
29	15.0	13.5	8.5	6.5	---	---	---	---	---	---	10.5	8.5
30	14.5	13.5	9.5	8.0	---	---	---	---	---	---	11.0	8.5
31	14.5	13.5	---	---	---	---	---	---	---	---	12.0	8.5
MONTH	20.0	11.0	15.0	1.5	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	9.0	16.0	12.5	23.5	19.0	29.5	26.0	25.5	24.0	27.5	24.5
2	12.0	10.0	16.0	13.0	24.0	20.0	28.5	26.0	26.0	24.0	29.0	25.5
3	12.5	9.5	14.5	12.5	24.0	21.0	29.0	25.0	25.5	24.0	29.5	23.5
4	12.5	9.0	15.0	11.5	25.5	22.0	28.5	25.5	24.5	22.0	24.0	23.5
5	12.5	8.5	14.0	11.5	26.5	23.5	28.5	25.5	23.5	21.0	26.0	24.0
6	11.0	9.0	13.5	13.0	28.0	23.5	28.0	26.0	25.5	21.5	---	---
7	12.0	8.5	13.5	12.5	27.5	23.5	28.0	27.0	26.0	23.0	---	---
8	13.5	8.5	---	---	27.0	24.0	28.5	27.0	26.0	24.0	---	---
9	14.0	9.5	13.5	13.0	27.0	22.5	29.0	27.5	26.5	25.0	---	---
10	15.0	10.0	15.0	13.5	25.0	22.5	27.5	26.0	27.0	25.5	---	---
11	16.0	11.0	16.0	15.0	26.0	23.5	27.5	25.0	27.5	25.0	---	---
12	17.5	12.0	16.5	15.0	26.0	23.0	27.5	25.0	25.5	24.0	---	---
13	18.5	14.0	16.0	14.0	25.0	23.5	28.5	25.0	26.5	24.0	26.0	20.5
14	17.5	14.0	14.0	13.0	26.0	23.0	27.5	25.5	26.5	24.5	21.5	20.0
15	18.0	13.5	15.5	13.5	24.0	23.0	26.5	25.5	27.0	25.0	25.0	22.0
16	18.0	13.5	17.5	15.0	25.5	22.0	27.0	25.0	26.5	25.0	24.0	19.0
17	17.5	14.0	20.0	17.0	26.5	21.5	28.0	25.0	28.0	24.5	20.5	19.0
18	19.0	15.0	21.5	18.5	26.5	22.5	26.5	24.5	28.0	25.0	21.0	20.0
19	20.0	15.0	22.5	19.5	26.5	24.5	25.5	24.0	29.0	24.0	22.0	20.0
20	20.5	16.0	22.5	20.0	27.5	25.5	25.5	24.0	29.5	26.0	---	---
21	20.0	16.0	22.5	19.5	28.0	25.0	---	24.0	---	---	---	---
22	16.5	14.0	22.5	18.5	26.5	25.5	---	---	---	---	---	---
23	16.0	13.0	22.5	17.5	27.0	25.0	---	---	---	---	---	---
24	15.0	11.5	22.0	17.5	28.0	25.5	---	---	---	---	---	---
25	15.0	11.0	21.0	19.0	27.5	26.0	27.5	24.0	---	---	---	---
26	15.5	12.0	20.0	17.5	27.5	23.5	26.5	24.0	24.0	23.0	---	---
27	14.5	11.5	19.5	17.5	26.5	23.0	26.0	24.5	25.5	23.0	---	---
28	15.5	12.5	19.5	16.0	27.5	23.0	26.5	24.0	25.0	21.5	25.0	19.5
29	15.5	11.0	18.5	16.0	29.5	23.5	26.5	24.0	24.0	23.0	25.5	22.5
30	15.5	12.5	21.0	16.0	29.5	25.0	25.0	23.0	25.5	23.5	29.0	23.5
31	---	---	22.5	17.0	---	---	23.5	22.5	26.5	24.0	---	---
MONTH	20.5	8.5	22.5	11.5	29.5	19.0	29.5	22.5	29.5	21.0	---	---

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO

LOCATION.--Lat 39°21'45", long 82°18'47", in NW 1/4 SW 1/4 sec.11, T.11 N., R.16 W., Vinton County, at gaging station on right bank, 250 ft upstream from Big Four Hollow Creek, 150 ft downstream from Morgan Hollow Creek, 2.5 miles southwest of Carbondale, and 3.7 miles northeast of Lake Hope.

DRAINAGE AREA.--0.98 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1970 to September 1971.
Water temperatures: January to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 3,090 micromhos Aug. 24, 25; minimum, 275 micromhos Feb. 5.
Water temperatures: Maximum, 32.5°C Sept. 5, 8-10; minimum, freezing point Jan. 30 to Feb. 3.

Period of record:
Specific conductance (January to September 1971): Maximum, 3,090 micromhos Aug. 24, 25, 1971; minimum, 275 micromhos Feb. 5, 1971.
Water temperatures: Maximum, 32.5°C Sept. 5, 8-10, 1971; minimum, freezing point Jan. 30 to Feb. 3, 1971.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since January 1971. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected on an approximate bi-weekly basis and partial analyses were made on these samples.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	SULFATE (SO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	TOTAL ACIDITY AS H+ (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)
OCT.											
16...	1030	.26	22000	4100	580	964	290	4.8	1510	3.0	9.5
27...	1500	.11	51000	5700	840	1380	390	7.3	1960	2.9	16.0
NOV.											
09...	1045	.29	55000	4200	640	992	280	5.9	1610	2.9	9.5
27...	1100	.38	46000	3500	560	878	300	5.2	1460	3.0	8.0
DEC.											
08...	1030	.29	52000	5300	580	892	350	4.8	1500	3.0	2.0
21...	1130	1.6	1800	1700	278	432	188	2.3	812	3.2	5.0
JAN.											
06...	1030	1.7	20000	1400	260	394	180	2.1	772	3.2	1.0
22...	1230	.74	31000	2200	390	556	260	3.4	1090	3.1	3.0
FEB.											
04...	1100	2.0	13000	1400	230	464	180	1.8	961	3.3	.5
18...	1415	2.0	10000	1100	180	278	140	1.3	624	3.5	--
MAR.											
02...	1030	1.2	19000	1700	280	396	180	2.3	811	3.2	5.5
15...	1345	3.2	5900	3400	180	298	130	1.4	526	3.6	11.5
29...	1130	.54	3700	2600	400	588	260	3.3	1150	3.0	8.0
APR.											
15...	1515	.28	74000	3300	500	726	300	4.0	1300	3.0	17.5
27...	1215	.18	47000	3800	620	950	300	5.0	1540	3.0	9.0
MAY											
14...	1430	1.9	8300	970	230	330	160	1.6	681	3.4	18.0
28...	1330	.21	32000	3500	540	852	330	4.4	1480	2.9	15.5
JUNE											
10...	1515	.05	62000	6000	1100	1620	660	9.2	2180	2.9	20.5
24...	1550	.04	73000	7800	1300	1960	800	2.2	2430	2.9	23.0
JULY											
09...	1430	.04	74000	9700	1500	2220	700	14	2740	2.8	23.5
22...	1030	.04	94000	9100	1500	2170	680	12	2600	2.9	17.0
AUG.											
04...	1230	3.0	3900	880	92	192	100	.3	306	4.6	18.5
18...	1015	.05	90000	11000	1530	2310	920	13	2690	2.8	17.5
31...	1130	.04	93000	11000	1500	2260	820	13	2640	2.8	17.5
SEP.											
17...	1210	.05	75000	9600	1300	1970	720	11	2450	2.8	17.0
30...	1300	.04	82000	10000	1400	2090	680	12	2560	2.8	20.0

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), JANUARY TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	1470	1360	---	---
2	---	---	---	---	---	---	---	---	1570	1400	---	---
3	---	---	---	---	---	---	---	---	1420	1250	---	---
4	---	---	---	---	---	---	---	---	1250	400	1040	---
5	---	---	---	---	---	---	---	---	400	275	991	775
6	---	---	---	---	---	---	---	---	600	365	883	384
7	---	---	---	---	---	---	1010	884	695	600	603	400
8	---	---	---	---	---	---	1040	924	852	694	690	600
9	---	---	---	---	---	---	1060	1040	863	669	---	---
10	---	---	---	---	---	---	1140	1050	886	702	---	---
11	---	---	---	---	---	---	1130	1070	825	734	---	---
12	---	---	---	---	---	---	1150	1090	749	429	694	596
13	---	---	---	---	---	---	1140	1050	551	406	761	691
14	---	---	---	---	---	---	---	---	677	535	828	753
15	---	---	---	---	---	---	---	---	740	666	821	592
16	---	---	---	---	---	---	---	---	764	724	750	694
17	---	---	---	---	---	---	---	---	750	535	783	747
18	---	---	---	---	---	---	---	---	636	468	841	772
19	---	---	---	---	---	---	---	---	553	486	845	825
20	---	---	---	---	---	---	---	---	501	453	863	805
21	---	---	---	---	---	---	---	---	562	494	894	805
22	---	---	---	---	---	---	---	---	541	---	920	869
23	---	---	---	---	---	---	---	---	---	---	935	881
24	---	---	---	---	---	---	---	---	---	---	1000	885
25	---	---	---	---	---	---	---	---	---	---	1050	888
26	---	---	---	---	---	---	---	---	---	---	1030	967
27	---	---	---	---	---	---	---	---	---	---	1030	991
28	---	---	---	---	---	---	1470	1240	---	---	1110	1030
29	---	---	---	---	---	---	1460	1040	---	---	1090	1030
30	---	---	---	---	---	---	1470	1150	---	---	1100	1040
31	---	---	---	---	---	---	1390	1250	---	---	1080	1040
MONTH	---	---	---	---	---	---	---	---	1570	---	1110	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1170	963	---	---	1670	1560	---	---	2600	2480	2730	2590
2	1070	928	---	---	1830	1720	---	---	2610	2530	2750	2640
3	1140	1030	---	---	1830	1740	---	---	---	---	2700	2500
4	1150	1090	---	---	1780	1670	---	---	864	297	2680	2490
5	1140	1090	---	---	1750	1600	---	---	1470	864	2600	2390
6	1140	1080	---	---	1680	1550	---	---	1760	1470	2530	2360
7	1250	1120	---	---	1970	1650	---	---	1920	1760	2570	2400
8	1240	1170	526	498	2030	1930	---	---	2080	1910	2600	2490
9	1290	1140	624	527	2070	1940	2950	2780	2200	1980	2580	2390
10	1390	1220	702	617	2200	1950	2930	1330	2240	2160	2540	2390
11	1320	1250	788	681	2280	2140	2140	1250	2210	1050	2530	2420
12	1280	1200	802	534	2260	1960	2570	1730	2290	2000	2490	2410
13	1290	1140	611	486	2090	1960	2560	1910	2430	2300	2490	2440
14	1380	1140	714	579	2000	1710	2710	1990	2540	2430	2530	2350
15	1320	1250	803	711	2080	1860	2530	1940	2580	2510	2530	2380
16	1320	1230	896	695	2260	2070	2430	897	2680	2570	2530	1550
17	1320	1260	934	776	2370	2210	2560	1840	2760	2660	2640	2300
18	1460	1310	1030	912	2420	2310	2590	1980	2840	2730	2730	2640
19	1430	1340	1040	994	2460	2350	2430	1620	2900	2780	2770	2700
20	1380	1280	1110	1020	2530	2330	2610	1930	2920	2820	2780	2130
21	1330	1230	1190	1070	2430	1380	2710	2020	2980	2870	2740	2430
22	1430	1230	1270	1160	2120	1840	2790	2070	2970	2860	2840	2710
23	1390	1290	1290	1210	2200	2020	2760	2070	3040	2930	2760	2500
24	1480	1280	1330	1270	2520	2160	2730	1040	3090	2950	2510	2440
25	1550	1390	1350	852	2620	1490	2470	1900	3090	1350	2450	1900
26	1530	1410	1480	1340	---	---	2550	1910	2110	783	---	---
27	1480	1320	1520	1450	---	---	2550	1850	2440	2110	---	---
28	---	---	1510	1280	---	---	2650	2070	2550	2430	2410	2250
29	---	---	1390	1310	---	---	2680	2520	2650	2540	2540	2410
30	---	---	1500	1340	---	---	2620	1950	2700	2630	2610	2570
31	---	---	1620	1460	---	---	2550	1820	2700	2590	---	---
MONTH	1550	928	---	---	2620	1380	---	---	3090	297	2840	1550
YEAR	3090	275										

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

PH (UNITS), JANUARY TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	2.9	2.8	---	---
2	---	---	---	---	---	---	---	---	2.8	2.7	---	---
3	---	---	---	---	---	---	---	---	2.9	2.8	---	---
4	---	---	---	---	---	---	---	---	4.6	2.9	3.4	3.1
5	---	---	---	---	---	---	---	---	4.6	3.6	4.4	3.3
6	---	---	---	---	---	---	---	---	3.6	2.9	5.0	3.3
7	---	---	---	---	---	---	3.2	3.1	2.9	2.8	3.9	3.6
8	---	---	---	---	---	---	3.2	3.1	2.8	2.6	3.6	3.4
9	---	---	---	---	---	---	3.1	3.0	2.8	2.6	---	---
10	---	---	---	---	---	---	3.7	3.0	2.7	2.5	---	---
11	---	---	---	---	---	---	3.5	3.2	2.8	2.6	---	---
12	---	---	---	---	---	---	3.2	3.1	3.3	2.7	3.1	3.0
13	---	---	---	---	---	---	3.2	2.7	3.2	3.0	3.2	3.0
14	---	---	---	---	---	---	---	---	3.0	2.8	3.2	3.1
15	---	---	---	---	---	---	---	---	2.8	2.7	3.3	2.8
16	---	---	---	---	---	---	---	---	2.8	2.7	3.0	2.8
17	---	---	---	---	---	---	---	---	3.0	2.7	2.8	2.8
18	---	---	---	---	---	---	---	---	3.2	2.8	2.8	2.7
19	---	---	---	---	---	---	---	---	3.2	3.0	2.8	2.7
20	---	---	---	---	---	---	---	---	3.2	3.0	2.9	2.7
21	---	---	---	---	---	---	---	---	3.0	2.9	3.0	2.8
22	---	---	---	---	---	---	---	---	3.4	2.9	3.0	2.9
23	---	---	---	---	---	---	---	---	---	---	2.9	2.7
24	---	---	---	---	---	---	---	---	---	---	3.0	2.8
25	---	---	---	---	---	---	---	---	---	---	3.1	2.8
26	---	---	---	---	---	---	---	---	---	---	3.1	2.9
27	---	---	---	---	---	---	---	---	---	---	3.2	3.0
28	---	---	---	---	---	---	3.1	2.8	---	---	3.3	3.2
29	---	---	---	---	---	---	3.1	3.0	---	---	3.2	3.1
30	---	---	---	---	---	---	3.2	3.0	---	---	3.2	3.1
31	---	---	---	---	---	---	3.0	2.8	---	---	3.2	3.0
MONTH	---	---	---	---	---	---	---	---	4.6	2.5	5.0	2.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.1	3.0	2.4	2.0	---	---	---	---	2.9	2.8	2.8	2.7
2	3.2	3.0	2.3	2.0	---	---	---	---	2.9	2.8	2.9	2.8
3	3.1	3.0	2.2	2.0	---	---	---	---	3.1	2.9	3.0	2.8
4	3.1	2.9	2.5	2.0	---	---	---	---	4.8	3.5	3.2	2.8
5	3.1	2.8	2.5	2.0	---	---	---	---	3.8	3.2	3.6	3.0
6	3.0	2.9	2.8	2.4	---	---	---	---	3.2	3.1	3.6	3.2
7	3.0	2.8	2.8	2.6	---	---	---	---	3.1	3.0	3.4	2.8
8	2.9	2.7	3.6	2.8	---	---	---	---	3.0	3.0	3.3	2.9
9	2.9	2.7	3.4	3.1	---	---	3.3	2.2	3.0	3.0	3.6	3.1
10	2.9	2.7	3.2	3.0	2.9	2.8	3.5	2.9	3.0	2.9	3.6	3.2
11	2.9	2.6	3.1	3.0	2.9	2.8	3.3	2.9	3.5	3.0	3.6	3.2
12	2.9	2.7	3.4	3.0	3.0	2.8	---	---	3.0	2.9	3.6	3.4
13	2.8	2.6	3.6	3.2	3.0	2.9	---	---	3.0	2.9	3.5	3.4
14	2.8	2.6	3.3	3.2	3.4	2.9	---	---	3.0	2.9	3.8	3.4
15	2.7	2.6	3.2	3.1	---	---	---	---	3.0	2.9	3.7	3.4
16	---	---	3.2	3.0	---	---	---	---	2.9	2.9	3.6	3.0
17	---	---	3.2	3.1	---	---	---	---	2.9	2.8	3.0	2.5
18	---	---	3.1	3.0	---	---	---	---	2.9	2.7	2.5	2.4
19	---	---	3.1	3.0	---	---	---	---	2.7	2.6	2.5	2.4
20	---	---	3.0	2.9	---	---	---	---	2.6	2.6	2.6	2.4
21	---	---	3.0	2.9	---	---	---	---	2.6	2.5	2.5	2.4
22	---	---	3.0	2.8	---	---	2.7	2.5	2.6	2.6	2.5	2.4
23	---	---	2.9	2.8	---	---	2.8	2.4	2.6	2.5	2.8	2.5
24	---	---	2.9	2.8	2.7	2.6	3.4	2.8	2.6	2.5	---	---
25	---	---	3.3	2.8	2.6	2.4	3.0	2.8	3.2	2.6	---	---
26	---	---	2.8	2.8	---	---	2.9	2.8	5.0	2.9	---	---
27	3.0	2.7	2.8	2.8	---	---	2.9	2.8	3.1	2.7	---	---
28	2.8	2.0	2.9	2.8	---	---	2.9	2.8	2.8	2.7	2.8	---
29	2.4	2.3	---	---	---	---	2.9	2.8	2.7	2.7	2.8	2.7
30	2.6	2.2	---	---	---	---	2.9	2.8	2.7	2.7	2.8	2.7
31	---	---	---	---	---	---	2.9	2.9	2.8	2.6	---	---
MONTH	---	---	3.6	2.0	---	---	---	---	5.0	2.5	3.8	2.4

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

TEMPERATURE (°C) OF WATER, JANUARY TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	0.5	0.0	---	---
2	---	---	---	---	---	---	---	---	0.5	0.0	---	---
3	---	---	---	---	---	---	---	---	0.5	0.0	---	---
4	---	---	---	---	---	---	---	---	0.5	0.5	5.5	1.0
5	---	---	---	---	---	---	---	---	3.5	1.0	6.5	1.0
6	---	---	---	---	---	---	---	---	5.0	1.0	6.5	2.5
7	---	---	---	---	---	---	2.0	1.0	3.0	1.5	6.0	3.0
8	---	---	---	---	---	---	2.5	1.0	3.0	0.5	4.5	2.5
9	---	---	---	---	---	---	4.0	2.5	1.0	0.5	---	---
10	---	---	---	---	---	---	3.5	1.0	1.0	0.5	---	---
11	---	---	---	---	---	---	4.0	1.5	3.0	0.5	---	---
12	---	---	---	---	---	---	5.0	3.5	3.5	2.0	10.0	5.0
13	---	---	---	---	---	---	4.0	3.5	3.5	2.0	10.0	4.5
14	---	---	---	---	---	---	---	---	3.5	2.0	14.0	4.0
15	---	---	---	---	---	---	---	---	3.5	2.5	12.0	7.0
16	---	---	---	---	---	---	---	---	6.0	2.5	7.0	4.0
17	---	---	---	---	---	---	---	---	5.5	2.5	6.5	2.5
18	---	---	---	---	---	---	---	---	7.0	2.5	8.0	1.0
19	---	---	---	---	---	---	---	---	8.0	4.0	7.0	3.5
20	---	---	---	---	---	---	---	---	7.0	5.5	5.5	2.0
21	---	---	---	---	---	---	---	---	7.0	5.5	11.0	0.5
22	---	---	---	---	---	---	---	---	---	5.0	7.0	3.5
23	---	---	---	---	---	---	---	---	---	---	6.5	1.5
24	---	---	---	---	---	---	---	---	---	---	7.0	0.5
25	---	---	---	---	---	---	---	---	---	---	8.0	0.5
26	---	---	---	---	---	---	---	---	---	---	9.5	3.0
27	---	---	---	---	---	---	---	---	---	---	11.5	1.0
28	---	---	---	---	---	---	0.5	0.5	---	---	13.0	4.0
29	---	---	---	---	---	---	0.5	0.5	---	---	10.0	4.0
30	---	---	---	---	---	---	0.5	0.0	---	---	12.0	2.0
31	---	---	---	---	---	---	0.5	0.0	---	---	14.5	1.5
MONTH	---	---	---	---	---	---	---	---	---	0.0	14.5	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	5.5	---	---	24.5	13.0	---	---	21.5	16.0	25.0	16.5
2	11.5	4.5	---	---	---	---	---	---	22.5	18.0	27.0	22.5
3	13.5	2.5	---	---	---	---	---	---	---	---	26.0	22.0
4	14.0	2.5	---	---	---	---	---	---	19.0	17.5	30.0	24.0
5	13.5	4.0	---	---	---	---	---	---	22.0	16.5	32.5	24.5
6	9.0	5.0	---	---	---	---	---	---	24.0	16.5	31.5	24.5
7	14.5	2.5	---	---	---	---	---	---	23.5	15.5	31.0	23.0
8	16.5	3.0	10.0	8.0	---	---	---	---	23.5	16.0	32.5	24.5
9	15.0	4.0	14.0	6.5	---	---	23.0	20.0	23.5	16.5	32.5	24.0
10	16.5	4.0	17.0	6.5	26.0	18.0	23.5	18.0	24.0	18.0	32.5	24.5
11	18.0	3.0	15.0	7.5	24.0	15.0	23.0	18.5	24.0	19.5	28.5	24.5
12	19.5	5.0	15.5	11.0	21.5	17.0	24.0	15.5	22.0	16.0	26.5	24.0
13	19.5	8.0	12.5	9.0	24.5	16.0	24.5	16.0	22.0	16.0	25.0	21.5
14	16.0	6.5	19.5	7.5	23.0	19.0	23.0	17.0	22.0	16.0	27.5	19.0
15	17.5	3.5	17.5	10.0	21.0	16.5	23.0	15.0	22.0	17.5	29.0	19.0
16	18.5	4.5	21.0	11.0	23.0	15.5	24.0	16.5	22.0	18.0	26.0	16.5
17	17.5	7.5	23.0	11.5	23.0	14.0	23.0	16.0	22.0	17.0	19.0	16.5
18	21.0	8.5	24.0	12.0	24.0	15.5	20.5	18.0	20.0	15.0	18.0	17.0
19	21.0	7.0	23.5	12.5	24.0	17.5	24.0	17.5	21.0	16.0	19.5	17.5
20	22.0	7.5	22.0	13.5	25.0	17.5	21.5	16.0	22.0	17.0	19.5	17.0
21	13.5	9.0	22.5	11.5	---	19.0	21.5	14.5	22.5	18.5	18.0	14.0
22	14.5	6.5	21.5	10.0	---	---	23.0	15.0	20.5	18.5	18.0	13.0
23	17.0	5.0	21.0	9.0	---	---	23.0	17.5	20.5	18.0	24.5	18.0
24	17.5	6.0	21.0	12.5	---	19.0	22.5	19.0	18.5	14.0	23.0	19.5
25	19.5	5.0	18.5	13.5	24.5	17.0	23.5	18.5	20.0	14.5	20.5	16.5
26	17.5	6.5	21.0	12.0	---	---	23.5	19.0	26.0	17.0	---	---
27	15.5	5.5	19.0	11.0	---	---	21.5	18.0	25.5	18.5	---	---
28	---	---	17.5	8.5	---	---	22.5	15.5	20.5	15.5	21.0	17.5
29	---	---	16.0	10.5	---	---	22.0	19.0	21.5	16.0	21.0	16.0
30	---	---	23.5	12.0	---	---	19.5	16.5	21.5	16.0	21.0	18.0
31	---	---	24.0	11.0	---	---	21.5	17.5	21.5	16.5	---	---
MONTH	22.0	2.5	---	---	---	---	---	---	26.0	14.0	32.5	13.0
YEAR	32.5	0.0										

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO

LOCATION.--Lat 39°21'48", long 82°18'51", in SE 1/4 NE 1/4 sec.11, T.11 N., R.16 W., Vinton County, at gaging station on right bank, 200 ft upstream from State Route 278 crossing, 300 ft upstream from mouth, 2.5 miles southwest of Carbondale, and 3.7 miles northeast of Lake Hope.

DRAINAGE AREA.--1.01 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1970 to September 1971.
Water temperatures: January to September 1971.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since January 1971. In addition to the continuous recorder, samples were collected on an approximate bi-weekly basis and partial analyses were made on these samples.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	SULFATE (SO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	TOTAL ACIDITY AS H+ (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)
OCT.											
16...	1115	.29	22000	7800	400	688	240	2.9	1050	3.1	11.0
27...	1530	.10	23000	9700	590	1020	250	5.6	1420	3.0	17.0
NOV.											
09...	1115	.28	16000	6200	380	602	230	3.4	1010	3.1	10.0
27...	1230	.38	14000	4800	310	492	220	2.5	868	3.2	8.5
DEC.											
08...	1100	.23	20000	5700	380	564	250	3.0	992	3.2	2.0
21...	1245	1.7	20000	1900	250	410	182	2.4	754	3.2	5.0
JAN.											
06...	1200	1.6	16000	2200	210	320	150	1.7	633	3.3	2.0
22...	1145	.55	21000	3200	280	410	170	2.4	822	3.2	1.5
FEB.											
04...	1345	2.1	5200	1800	140	214	110	.8	430	3.7	.5
18...	1215	1.9	12000	2000	170	268	130	1.2	512	3.5	6.0
MAR.											
01...	1250	.93	12000	2500	220	324	150	1.8	644	3.3	10.0
15...	1330	2.3	8600	3800	160	250	120	1.1	464	3.6	11.0
29...	1300	.46	1800	3400	290	436	170	2.6	879	3.1	9.5
APR.											
15...	1145	.22	24000	4200	360	554	270	3.0	1030	3.0	13.0
27...	1045	.14	38000	5200	450	686	250	4.1	1200	3.0	7.5
MAY											
14...	1100	2.0	8300	2000	190	290	140	1.4	597	3.4	12.5
27...	1400	.20	27000	4400	380	618	240	3.2	1110	3.0	17.5
JUNE											
10...	1430	.04	43000	7000	730	1110	500	6.8	1620	2.9	22.5
24...	1100	.04	70000	9700	800	1170	320	7.5	1770	2.8	19.5
JULY											
09...	1230	.01	83000	12000	1100	1630	470	12	2110	2.8	25.0
22...	1300	.03	81000	12000	910	1380	430	9.4	1950	2.8	22.5
AUG.											
04...	1045	11	2200	1700	100	172	90	.1	259	4.3	18.5
18...	1105	.07	87000	14000	1030	1590	560	12	2100	2.8	20.0
31...	1250	.04	63000	14000	870	1330	480	8.4	1870	2.8	23.0
SEP.											
17...	1105	.04	42000	14000	780	1190	400	7.0	1670	2.9	18.0
30...	1440	.04	30000	14000	710	1120	360	6.2	1540	3.0	25.5

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), JANUARY TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	527	---
2	---	---	---	---	---	---	---	---	---	---	539	514
3	---	---	---	---	---	---	---	---	---	---	541	502
4	---	---	---	---	---	---	---	---	---	---	586	524
5	---	---	---	---	---	---	---	---	---	---	583	417
6	---	---	---	---	---	---	---	---	---	---	458	138
7	---	---	---	---	---	---	856	738	---	---	342	148
8	---	---	---	---	---	---	882	682	---	---	455	342
9	---	---	---	---	---	---	858	773	---	---	567	429
10	---	---	---	---	---	---	861	805	---	---	484	240
11	---	---	---	---	---	---	874	794	---	---	335	250
12	---	---	---	---	---	---	861	830	---	---	409	256
13	---	---	---	---	---	---	856	699	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	518	279
16	---	---	---	---	---	---	---	---	---	---	486	433
17	---	---	---	---	---	---	---	---	---	---	506	486
18	---	---	---	---	---	---	---	---	388	342	518	505
19	---	---	---	---	---	---	---	---	398	296	---	---
20	---	---	---	---	---	---	---	---	422	333	---	---
21	---	---	---	---	---	---	---	---	476	422	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	725	719
24	---	---	---	---	---	---	---	---	---	---	789	606
25	---	---	---	---	---	---	---	---	---	---	821	606
26	---	---	---	---	---	---	---	---	---	---	803	626
27	---	---	---	---	---	---	995	914	---	---	838	622
28	---	---	---	---	---	---	995	912	---	---	852	636
29	---	---	---	---	---	---	1010	982	---	---	856	822
30	---	---	---	---	---	---	---	---	---	---	944	852
31	---	---	---	---	---	---	---	---	---	---	894	652
MONTH	---	---	---	---	---	---	---	---	---	---	944	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	791	633	---	---	1310	1270	---	---	1860	1710	2240	1720
2	779	622	---	---	1330	1010	---	---	1820	1330	2240	1720
3	764	616	---	---	1350	1020	---	---	1880	767	2100	1320
4	760	610	---	---	1380	1050	---	---	767	262	1930	1420
5	887	591	---	---	1410	1370	---	---	904	671	2080	1600
6	886	863	---	---	1440	1400	---	---	1140	933	2160	1700
7	946	871	---	---	1460	1440	---	---	1310	1130	2140	1580
8	983	918	---	---	1490	1460	---	---	1480	1310	2190	1900
9	1000	939	---	---	1500	1480	2290	1990	1600	1240	2230	1750
10	978	923	---	---	1770	1470	2200	1090	1630	1200	2230	1690
11	956	919	810	616	1790	1370	1330	1090	1560	948	2300	1670
12	948	916	814	636	1790	1390	1770	1020	1790	1470	2080	1560
13	925	898	662	527	1770	1080	1730	1510	1890	1730	1960	1420
14	915	872	677	538	1540	1130	1880	1680	1970	1880	1850	1290
15	988	845	743	677	1590	1450	2070	1830	2020	1540	1860	1520
16	1010	806	829	604	1700	1570	1880	1360	2120	2000	1880	1380
17	998	925	803	765	1770	1640	1480	1430	2220	2090	1810	1620
18	1030	973	853	630	1780	1700	1510	1470	2290	1760	1910	1750
19	1070	992	882	803	1800	1710	1550	1490	2320	2230	1860	1820
20	1080	1010	912	853	1870	1740	1860	1550	2520	2280	1870	1470
21	1040	950	947	886	1870	1060	1960	1830	2450	2110	1830	1620
22	1040	982	994	923	1810	1460	1930	1810	2510	1970	1940	1830
23	1070	1020	---	---	1950	1790	1890	1760	2450	1820	1940	1880
24	1090	1040	---	---	1980	1780	1820	843	2510	2040	1990	1910
25	1150	1060	---	---	1980	1710	1590	1330	2570	1240	2120	1640
26	1140	1080	---	---	---	---	1720	1700	1360	712	1640	916
27	1120	1070	---	---	---	---	1730	1520	1570	1190	1530	1300
28	---	---	1170	1120	---	---	1860	1710	1700	1470	1470	942
29	---	---	1240	1160	---	---	1830	1760	1830	1520	1540	1440
30	---	---	1240	1170	---	---	1810	1460	2100	1520	1550	1520
31	---	---	1280	1210	---	---	1780	1590	2200	1730	---	---
MONTH	1150	591	---	---	1980	1010	---	---	2570	262	2300	916

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

PH (UNITS), JANUARY TO SEPTEMBER 1971

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	---	---	---	---	---	---	---	---	---	---	3.7	3.6
2	---	---	---	---	---	---	---	---	---	---	3.8	3.6
3	---	---	---	---	---	---	---	---	---	---	3.7	2.9
4	---	---	---	---	---	---	---	---	---	---	3.1	2.8
5	---	---	---	---	---	---	---	---	---	---	3.3	2.8
6	---	---	---	---	---	---	---	---	---	---	3.7	2.7
7	---	---	---	---	---	---	3.3	3.0	---	---	3.7	3.2
8	---	---	---	---	---	---	3.2	3.1	---	---	3.2	3.1
9	---	---	---	---	---	---	3.2	3.0	---	---	3.3	3.0
10	---	---	---	---	---	---	3.2	3.0	---	---	3.6	3.1
11	---	---	---	---	---	---	3.3	3.0	---	---	3.7	3.6
12	---	---	---	---	---	---	3.1	2.9	---	---	3.7	3.6
13	---	---	---	---	---	---	3.1	3.0	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	3.8	3.3	---	---
19	---	---	---	---	---	---	---	---	3.7	3.6	---	---
20	---	---	---	---	---	---	---	---	3.7	3.6	---	---
21	---	---	---	---	---	---	---	---	3.8	3.6	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	3.8	3.5
24	---	---	---	---	---	---	---	---	---	---	3.5	3.1
25	---	---	---	---	---	---	---	---	---	---	3.1	2.8
26	---	---	---	---	---	---	---	---	---	---	3.1	3.0
27	---	---	---	---	---	---	3.5	3.0	---	---	---	---
28	---	---	---	---	---	---	3.0	2.9	---	---	---	---
29	---	---	---	---	---	---	3.3	3.0	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	2.7	2.4
31	---	---	---	---	---	---	---	---	---	---	2.8	2.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	2.9	2.8	---	---	3.1	3.0	---	---	2.8	2.6	2.9	2.8
2	3.0	2.9	---	---	3.1	3.0	---	---	2.8	2.6	2.9	2.8
3	3.0	2.9	---	---	3.1	3.0	---	---	3.0	2.6	3.1	2.8
4	3.4	2.9	---	---	3.1	3.0	---	---	4.0	3.0	3.0	2.9
5	3.0	2.6	---	---	3.1	3.0	---	---	3.2	2.9	2.9	2.8
6	2.6	2.5	---	---	3.0	2.9	---	---	3.0	2.8	2.9	2.8
7	2.6	2.5	---	---	3.0	2.9	---	---	2.9	2.6	2.8	2.7
8	2.6	2.4	---	---	3.0	2.9	---	---	2.8	2.6	2.8	2.7
9	2.6	2.4	---	---	3.0	2.9	3.5	3.4	2.8	2.6	2.8	2.7
10	2.7	2.5	---	---	3.0	3.0	3.6	3.4	2.8	2.6	2.8	2.6
11	3.2	2.7	3.4	3.3	3.1	3.0	3.7	3.6	3.1	2.6	2.8	2.7
12	2.8	2.7	3.4	3.2	3.2	3.0	3.6	3.4	2.8	2.6	2.8	2.7
13	2.9	2.8	3.6	3.4	3.3	3.0	3.4	3.3	2.8	2.6	2.9	2.8
14	2.9	2.8	3.7	3.2	3.4	3.0	3.3	3.3	2.7	2.6	2.9	2.6
15	2.9	2.6	3.3	3.2	3.0	3.0	3.3	3.2	2.7	2.6	2.8	2.6
16	2.9	2.8	3.2	3.1	3.0	3.0	3.4	3.1	2.6	2.5	2.7	2.5
17	2.9	2.8	3.2	3.1	3.0	3.0	3.4	3.3	2.8	2.6	2.7	2.5
18	3.0	2.8	3.2	3.0	3.0	2.9	3.4	3.3	3.0	2.8	2.7	2.5
19	3.0	2.8	3.2	3.0	3.0	2.9	3.4	3.3	3.0	2.8	2.7	2.5
20	3.0	2.8	3.2	3.0	3.0	2.9	3.3	3.1	2.9	2.8	2.7	2.5
21	3.0	2.9	3.2	3.0	3.2	2.9	3.2	3.1	2.8	2.8	2.9	2.6
22	3.0	2.9	3.2	3.0	3.0	2.9	3.1	2.6	2.8	2.7	2.9	2.6
23	3.0	2.9	---	---	3.0	2.8	2.8	2.7	2.9	2.7	2.8	2.6
24	3.0	2.9	---	---	2.9	2.8	3.0	2.8	2.9	2.8	2.8	2.5
25	3.0	2.9	---	---	---	---	3.0	2.8	3.2	2.8	2.7	2.5
26	3.0	2.9	---	---	---	---	2.9	2.8	3.7	3.1	2.9	2.7
27	3.0	2.9	---	---	---	---	2.9	2.8	3.1	3.0	3.0	2.7
28	---	---	3.5	3.2	---	---	2.9	2.7	3.1	2.9	3.0	2.8
29	---	---	3.2	3.1	---	---	2.9	2.7	3.0	2.9	2.9	2.7
30	---	---	3.2	3.1	---	---	2.9	2.8	3.0	2.8	2.8	2.7
31	---	---	3.2	3.1	---	---	2.9	2.7	3.0	2.8	---	---
MONTH	3.4	2.4	---	---	3.4	2.8	---	---	4.0	2.5	3.1	2.5

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

TEMPERATURE (°C) OF WATER, JANUARY TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	10.0	4.5
2	---	---	---	---	---	---	---	---	---	---	9.5	4.0
3	---	---	---	---	---	---	---	---	---	---	4.0	0.5
4	---	---	---	---	---	---	---	---	---	---	4.0	0.5
5	---	---	---	---	---	---	---	---	---	---	6.0	0.5
6	---	---	---	---	---	---	---	---	---	---	7.5	4.5
7	---	---	---	---	---	---	1.0	0.5	---	---	6.5	5.0
8	---	---	---	---	---	---	1.0	0.5	---	---	6.0	4.5
9	---	---	---	---	---	---	1.0	0.5	---	---	5.0	0.0
10	---	---	---	---	---	---	2.0	0.5	---	---	1.5	0.0
11	---	---	---	---	---	---	2.5	0.5	---	---	---	1.5
12	---	---	---	---	---	---	4.0	2.0	---	---	11.0	7.5
13	---	---	---	---	---	---	3.5	2.5	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	11.5	7.0
16	---	---	---	---	---	---	---	---	---	---	7.0	3.5
17	---	---	---	---	---	---	---	---	---	---	4.5	2.0
18	---	---	---	---	---	---	---	---	5.5	2.5	3.0	0.5
19	---	---	---	---	---	---	---	---	7.0	1.5	---	---
20	---	---	---	---	---	---	---	---	6.0	4.0	---	---
21	---	---	---	---	---	---	---	---	5.5	3.5	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	0.0
24	---	---	---	---	---	---	---	---	---	---	---	0.0
25	---	---	---	---	---	---	---	---	---	---	---	0.0
26	---	---	---	---	---	---	---	---	---	---	---	0.0
27	---	---	---	---	---	---	0.0	0.0	---	---	---	---
28	---	---	---	---	---	---	0.0	0.0	---	---	---	---
29	---	---	---	---	---	---	0.0	0.0	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	27.0	15.0	26.0	14.5
2	---	---	---	---	---	---	---	---	26.0	18.0	21.0	16.0
3	---	---	---	---	---	---	---	---	23.5	19.0	19.5	17.5
4	---	---	---	---	---	---	---	---	19.0	18.0	25.5	17.5
5	---	---	---	---	---	---	---	---	23.0	17.0	27.5	17.5
6	---	---	---	---	---	---	---	---	26.5	17.0	28.5	17.5
7	---	---	---	---	---	---	---	---	27.0	16.0	28.5	18.5
8	---	---	---	---	---	---	---	---	27.5	17.0	29.5	18.5
9	---	---	---	---	---	---	---	---	27.5	17.0	27.5	17.0
10	---	---	---	---	25.5	19.0	---	19.0	27.0	19.0	28.5	18.0
11	---	---	---	12.0	24.5	16.0	---	19.5	26.5	19.0	22.5	18.0
12	---	---	---	---	21.5	18.0	---	---	28.5	16.0	23.0	18.5
13	---	---	---	---	---	18.0	---	---	29.5	16.0	18.5	17.5
14	---	---	21.0	12.0	---	19.5	---	17.5	29.5	16.0	25.5	14.5
15	16.0	8.5	18.0	10.0	22.5	18.0	---	---	27.0	18.0	26.5	14.5
16	16.5	5.0	18.0	12.0	25.5	16.5	---	19.5	30.5	18.5	18.5	16.0
17	17.5	8.0	23.5	14.5	25.0	15.5	---	---	30.5	16.5	20.5	17.0
18	21.0	8.5	25.0	11.5	24.5	16.5	---	---	29.0	17.5	20.0	17.0
19	21.5	8.0	23.0	13.0	26.5	18.5	---	---	29.5	18.0	21.0	18.0
20	22.0	7.5	22.5	12.5	27.0	18.5	---	18.5	28.5	19.5	21.0	16.5
21	13.5	8.5	23.0	11.5	24.5	20.0	26.0	17.5	30.0	21.0	22.0	13.0
22	14.0	8.0	24.5	12.5	---	---	24.5	18.0	25.5	21.0	23.5	12.5
23	17.0	8.0	---	---	---	---	25.5	18.5	30.5	20.5	20.0	15.0
24	17.0	8.0	---	---	---	---	23.5	20.5	28.5	14.5	21.0	13.0
25	16.5	5.0	---	---	---	---	25.0	20.0	26.5	15.5	19.5	---
26	17.0	7.5	---	---	---	---	26.5	20.0	24.0	18.5	20.0	15.5
27	13.0	5.5	---	---	---	---	26.0	18.5	26.0	18.5	29.5	16.5
28	---	---	18.0	15.0	---	---	26.0	15.5	24.5	15.5	27.5	19.0
29	---	---	---	15.5	---	---	27.5	18.0	28.0	16.0	26.0	16.5
30	---	---	---	---	---	---	20.0	15.5	27.5	16.0	25.5	18.0
31	---	---	22.5	19.0	---	---	25.0	17.0	24.5	17.0	---	---
MONTH	---	---	---	---	---	---	---	---	30.5	14.5	29.5	12.5

03201800 SANDY RUN NEAR LAKE HOPE, OHIO

LOCATION.--Lat 39°20'01", long 82°19'56", in T.11 N., R.16 W., Vinton County, at gaging station on right bank at upstream side of bridge on King Hollow Trail, 1,200 ft downstream from Harbargar Hollow, 2.6 miles upstream from spillway of Lake Hope, and 5 miles northeast of Zaleski.

DRAINAGE AREA.--4.99 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1959 to September 1961, April 1970 to September 1971. Water temperatures: December 1970 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,320 micromhos Sept. 27, 28; minimum, 89 micromhos Mar. 7.
pH: Maximum, 4.8 Feb. 5; minimum, 2.1 Mar. 25.
Dissolved oxygen: Maximum, 15.0 mg/l Jan. 22; minimum, 4.1 mg/l Aug. 19.
Water temperatures: Maximum, 27.5°C July 7; minimum, freezing point Jan. 19-22, Jan. 31 to Feb. 6, Feb. 8-18, Mar. 9.

Period of record:
Specific conductance (December 1970 to September 1971): Maximum, 1,320 micromhos Sept. 27, 28, 1971; minimum, 89 micromhos Mar. 7, 1971.
pH (December 1970 to September 1971): Maximum, 4.8 Feb. 5, 1971; minimum, 2.1 Mar. 25, 1971.
Dissolved oxygen (December 1970 to September 1971): Maximum, 15.0 mg/l Jan. 22, 1971; minimum, 4.1 mg/l Aug. 19, 1971.
Water temperatures: Maximum, 27.5°C July 7, 1971; minimum, freezing point Jan. 19-22, Jan. 31 to Feb. 6, Feb. 8-18, Mar. 9, 1971.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since December 1970. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected on an approximate bi-weekly basis and partial analyses were made on these samples.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	SULFATE (SO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	TOTAL ACIDITY AS H+ (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)
OCT.											
16...	1415	1.7	3300	1900	280	424	190	2.0	739	3.5	13.0
27...	1630	.64	2800	5000	310	502	240	2.2	801	3.5	15.0
NOV.											
09...	1215	1.3	4100	3300	210	394	170	2.0	703	3.5	11.0
27...	1400	1.6	4200	2400	220	348	170	1.6	637	3.5	7.5
DEC.											
08...	1300	--	5400	2800	260	382	190	1.8	698	3.5	2.0
21...	1315	9.0	570	120	170	258	122	1.4	527	3.5	5.0
JAN.											
06...	1415	8.8	4200	1000	120	180	110	.8	365	3.7	1.5
22...	1340	3.4	5200	1400	160	258	120	1.2	494	3.6	1.5
FEB.											
04...	1345	62	1200	380	55	108	51	.4	182	4.7	.5
18...	1545	12	3200	800	110	146	85	.7	348	3.9	--
MAR.											
02...	1400	5.5	3400	1100	120	210	93	.9	377	3.8	8.0
15...	1300	20	1500	3300	98	170	75	.7	313	4.0	--
29...	1415	2.5	4000	1800	160	274	120	1.2	488	3.6	8.5
APR.											
15...	1410	1.4	3000	2200	200	292	140	2.0	561	3.6	12.0
27...	1400	.78	2800	2500	220	332	170	1.4	622	3.5	11.0
MAY											
14...	1315	11	3800	910	110	180	86	.6	326	3.9	12.0
27...	1245	1.4	1700	1600	170	268	130	1.0	514	3.6	13.5
JUNE											
10...	1330	1.1	1400	2500	200	326	160	1.2	568	3.8	--
24...	1435	.25	2100	2700	220	378	180	1.2	602	3.7	23.0
JULY											
09...	1110	.05	1500	2900	190	286	150	1.1	542	3.7	22.5
23...	1115	.05	3200	4300	240	374	190	1.3	642	3.8	19.0
AUG.											
04...	1355	30	1100	1300	85	150	74	.3	236	4.5	18.0
18...	1340	.07	2400	4800	240	376	200	1.1	622	3.7	22.0
31...	1350	.10	27000	5800	310	488	240	1.6	757	3.6	21.0
SEP.											
17...	1400	.15	6000	7600	390	620	310	2.2	900	3.6	17.5
30...	1205	.20	3000	9000	490	768	360	2.9	1060	3.6	19.0

03201800 SANDY RUN NEAR LAKE HOPE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), DECEMBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	638	621	---	---	617	570	---	---
2	---	---	---	---	741	618	---	---	649	570	---	---
3	---	---	---	---	773	629	---	---	614	596	---	---
4	---	---	---	---	824	632	---	---	628	292	546	515
5	---	---	---	---	779	725	---	---	321	102	564	398
6	---	---	---	---	801	764	---	---	465	321	408	113
7	---	---	---	---	810	755	405	333	538	465	257	89
8	---	---	---	---	816	678	393	342	641	538	344	256
9	---	---	---	---	727	640	---	---	721	641	380	261
10	---	---	---	---	732	663	---	---	783	704	---	---
11	---	---	---	---	700	580	375	360	752	635	---	---
12	---	---	---	---	619	150	---	---	636	334	339	225
13	---	---	---	---	390	150	---	---	451	312	386	293
14	---	---	---	---	---	---	300	---	545	451	440	270
15	---	---	---	---	---	---	267	---	617	535	365	173
16	---	---	---	---	---	---	321	267	590	489	431	290
17	---	---	---	---	---	---	327	300	596	413	462	303
18	---	---	---	---	---	---	438	327	539	324	408	315
19	---	---	---	---	---	---	506	437	401	318	378	341
20	---	---	---	---	---	---	489	453	354	303	404	368
21	---	---	---	---	512	182	462	433	413	354	429	303
22	---	---	---	---	---	---	520	421	---	---	410	377
23	---	---	---	---	---	---	539	460	---	---	457	410
24	---	---	---	---	---	---	534	482	---	---	512	457
25	---	---	---	---	---	---	491	441	---	---	584	480
26	---	---	---	---	---	---	687	479	---	---	537	451
27	---	---	---	---	---	---	669	357	---	---	532	402
28	---	---	---	---	---	---	672	528	---	---	408	406
29	---	---	---	---	---	---	599	510	---	---	500	455
30	---	---	---	---	---	---	601	517	---	---	544	438
31	---	---	---	---	---	---	592	538	---	---	572	422
MONTH	---	---	---	---	---	---	---	---	---	---	584	89

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	519	461	682	545	593	459	680	635	764	643	753	671
2	534	444	650	601	554	513	708	639	662	591	729	672
3	547	424	677	416	579	489	714	632	676	564	745	688
4	554	438	571	454	575	461	682	594	636	215	786	744
5	547	465	588	468	591	482	652	571	592	350	797	726
6	553	521	474	199	---	---	623	568	661	538	780	702
7	612	482	315	172	---	---	636	530	692	615	747	684
8	618	477	284	201	582	569	615	518	720	648	737	678
9	604	491	363	266	624	582	570	511	726	664	743	659
10	597	491	390	251	668	480	592	519	711	648	708	636
11	628	475	384	254	630	515	1160	591	844	645	692	618
12	624	485	380	259	572	540	1050	908	927	813	726	681
13	576	495	322	226	617	545	915	828	879	717	774	711
14	629	539	410	276	807	211	845	771	816	678	833	758
15	644	554	431	312	309	181	822	714	732	630	827	731
16	681	548	455	358	377	309	1160	685	705	621	885	747
17	609	531	432	316	462	355	1090	884	682	567	926	884
18	596	482	455	354	463	328	884	812	685	576	896	876
19	604	454	479	409	455	323	840	785	651	558	921	896
20	573	459	482	422	450	385	875	800	615	535	929	884
21	615	536	535	442	603	373	871	736	592	523	1010	927
22	656	604	570	471	633	513	800	662	579	542	1010	902
23	669	547	606	480	713	569	714	594	633	565	950	885
24	674	555	545	486	654	565	770	682	---	---	951	896
25	683	514	611	401	610	531	868	758	---	---	990	821
26	640	535	491	424	935	288	892	812	1280	738	1010	858
27	668	569	530	477	570	394	876	788	792	744	1320	1010
28	681	489	597	516	614	540	852	688	830	768	1320	1120
29	582	545	590	537	803	600	716	678	830	734	1130	1040
30	656	536	597	488	739	661	766	623	816	714	1070	1000
31	---	---	617	483	---	---	772	708	778	693	---	---
MONTH	683	424	682	172	935	181	1160	511	1280	215	1320	618
YEAR	1320	89										

03201800 SANDY RUN NEAR LAKE HOPE, OHIO--Continued

PH (UNITS), DECEMBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	---	---	---	---	3.3	3.2	---	---	3.3	3.2	---	---
2	---	---	---	---	3.3	3.1	---	---	3.3	3.1	---	---
3	---	---	---	---	3.4	3.2	---	---	3.3	3.2	---	---
4	---	---	---	---	3.5	3.4	---	---	4.2	2.9	3.4	3.3
5	---	---	---	---	3.5	3.4	---	---	4.8	4.0	3.6	---
6	---	---	---	---	3.6	3.5	---	---	4.1	3.7	4.2	---
7	---	---	---	---	3.6	3.5	3.3	3.0	3.7	3.6	4.4	---
8	---	---	---	---	3.4	3.3	3.2	3.0	3.6	3.5	3.8	3.7
9	---	---	---	---	3.4	3.3	---	---	3.6	3.4	3.8	3.5
10	---	---	---	---	3.4	3.3	---	---	3.6	3.3	---	---
11	---	---	---	---	4.2	3.3	3.0	2.8	3.5	3.4	---	---
12	---	---	---	---	4.0	3.3	---	---	4.1	3.4	3.7	---
13	---	---	---	---	4.0	3.6	---	---	4.2	3.9	3.7	3.5
14	---	---	---	---	---	---	4.1	3.1	3.9	3.5	3.6	3.4
15	---	---	---	---	---	---	3.7	3.4	3.6	3.5	3.9	3.5
16	---	---	---	---	---	---	3.4	3.1	3.5	3.4	3.6	3.7
17	---	---	---	---	---	---	3.2	3.1	3.7	3.4	3.8	3.6
18	---	---	---	---	---	---	3.3	3.0	3.6	3.3	3.6	3.5
19	---	---	---	---	---	---	3.2	3.1	3.5	3.3	3.6	3.5
20	---	---	---	---	---	---	3.2	3.0	3.5	3.4	3.6	3.5
21	---	---	---	---	3.8	3.5	3.1	3.0	3.4	3.3	3.6	3.5
22	---	---	---	---	---	---	3.2	3.0	---	---	3.6	---
23	---	---	---	---	---	---	3.2	3.1	---	---	---	---
24	---	---	---	---	---	---	3.3	3.2	---	---	3.6	3.4
25	---	---	---	---	---	---	3.3	3.2	---	---	3.7	2.1
26	---	---	---	---	---	---	3.4	3.2	---	---	3.6	2.6
27	---	---	---	---	---	---	3.4	3.1	---	---	3.6	3.5
28	---	---	---	---	---	---	3.3	3.3	---	---	3.6	3.4
29	---	---	---	---	---	---	3.3	3.2	---	---	3.4	3.3
30	---	---	---	---	---	---	3.2	3.1	---	---	3.4	3.3
31	---	---	---	---	---	---	3.3	3.1	---	---	3.4	3.4
MONTH	---	---	---	---	---	---	---	---	---	---	4.4	---

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	3.4	3.4	3.4	3.3	3.6	3.5	3.4	3.4	3.6	3.6	3.4	3.2
2	3.4	3.4	3.4	3.3	3.6	3.5	3.5	3.3	3.6	3.6	3.3	3.2
3	3.5	3.4	3.7	3.3	3.6	3.5	3.5	3.3	3.6	3.2	3.3	3.2
4	3.4	3.4	3.6	3.4	3.6	3.5	3.6	3.3	4.3	3.4	3.2	3.1
5	3.4	3.4	3.6	3.4	3.6	3.5	3.6	3.4	3.8	3.3	3.2	3.1
6	3.4	3.4	4.4	3.6	---	---	3.6	3.4	3.5	3.3	3.2	3.2
7	3.4	3.3	4.5	3.8	---	---	3.6	3.4	3.5	3.3	3.2	3.2
8	3.4	3.3	4.5	3.9	3.5	3.4	3.6	3.6	3.5	3.4	3.2	3.2
9	3.3	3.3	3.9	3.6	3.5	3.5	3.6	3.6	3.5	3.4	3.2	3.2
10	3.4	3.3	3.7	3.4	3.6	3.3	3.7	3.6	3.5	3.3	3.2	3.2
11	3.4	3.2	3.6	3.5	3.6	3.5	3.6	3.3	3.5	3.3	3.2	3.2
12	3.3	3.2	3.9	3.5	3.6	3.3	3.4	3.3	3.4	3.4	3.2	3.2
13	3.3	3.2	4.2	3.9	3.6	3.4	3.5	3.3	3.4	3.3	3.3	3.2
14	3.3	3.2	4.1	3.6	3.8	3.1	3.5	3.3	3.5	3.3	3.2	3.1
15	3.4	3.1	3.7	3.5	4.0	3.6	3.6	3.4	3.6	3.4	3.2	3.2
16	---	---	3.6	3.4	3.6	3.5	3.7	3.1	3.6	3.4	3.3	3.2
17	---	---	3.6	3.4	3.6	3.5	3.4	3.3	3.6	3.4	3.2	3.1
18	3.5	3.3	3.5	3.4	3.6	3.5	3.5	3.3	3.7	3.6	3.2	3.1
19	3.4	3.2	3.5	3.4	3.6	3.5	3.5	3.3	3.7	3.6	3.2	3.1
20	3.3	3.1	3.4	3.4	3.6	3.5	3.5	3.3	3.7	3.6	3.3	3.2
21	3.3	3.2	3.4	3.4	3.6	3.5	3.6	3.4	3.6	3.6	3.3	3.2
22	3.3	3.3	3.5	3.4	3.5	3.4	3.6	3.4	3.6	3.6	3.4	3.3
23	3.4	3.3	3.5	3.4	3.4	3.3	3.6	3.4	3.6	3.6	3.4	3.3
24	3.4	3.3	3.4	3.4	3.6	3.3	3.6	3.4	---	---	3.6	3.4
25	3.4	3.3	3.5	3.3	3.6	3.4	3.5	3.3	---	---	3.6	3.5
26	3.4	3.3	3.5	3.4	3.9	3.3	3.5	3.3	3.7	3.0	3.7	3.5
27	3.4	3.3	3.6	3.3	3.6	3.4	3.5	3.3	3.4	3.3	3.6	3.2
28	3.4	3.2	3.6	3.6	3.5	3.4	3.6	3.4	3.4	3.3	3.5	3.3
29	3.4	3.3	3.6	3.6	3.4	3.1	3.6	3.4	3.4	3.3	3.5	3.4
30	3.4	3.3	3.6	3.5	3.4	3.3	3.7	3.4	3.4	3.4	3.6	3.5
31	---	---	3.6	3.5	---	---	3.6	3.4	3.5	3.4	---	---
MONTH	3.5	3.1	4.5	3.3	4.0	3.1	3.7	3.1	4.3	3.0	3.7	3.1
YEAR	4.8	2.1										

03201800 SANDY RUN NEAR LAKE HOPE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, DECEMBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	10.5	9.7	---	---	12.3	11.5	---	---
2	---	---	---	---	10.6	9.6	---	---	11.8	11.2	---	---
3	---	---	---	---	11.0	9.9	---	---	11.4	11.1	---	---
4	---	---	---	---	---	---	---	---	13.8	11.4	11.8	11.6
5	---	---	---	---	---	---	---	---	14.0	13.6	11.6	8.4
6	---	---	---	---	---	---	---	---	14.1	13.6	9.8	7.3
7	---	---	---	---	---	---	13.4	12.6	14.2	13.9	11.3	9.5
8	---	---	---	---	13.6	8.9	13.7	11.8	13.9	13.6	11.5	11.1
9	---	---	---	---	13.9	11.7	---	---	13.8	13.5	11.6	10.7
10	---	---	---	---	---	---	---	---	14.0	13.0	---	---
11	---	---	---	---	---	---	12.1	12.0	13.7	13.0	---	---
12	---	---	---	---	---	---	---	---	14.0	13.5	11.0	10.3
13	---	---	---	---	---	---	---	---	14.0	13.7	10.8	10.0
14	---	---	---	---	---	---	12.7	12.4	14.1	13.7	10.8	9.4
15	---	---	---	---	---	---	13.1	12.7	13.7	13.4	10.6	9.8
16	---	---	---	---	---	---	13.4	13.1	13.5	13.0	11.1	10.6
17	---	---	---	---	---	---	13.3	12.8	13.3	12.8	11.3	11.0
18	---	---	---	---	---	---	13.6	12.8	14.7	12.7	11.6	10.6
19	---	---	---	---	---	---	12.8	12.5	13.0	12.3	10.9	10.4
20	---	---	---	---	---	---	12.7	12.3	14.6	12.3	11.2	10.8
21	---	---	---	---	12.3	11.7	12.7	12.2	12.7	12.4	11.4	10.2
22	---	---	---	---	---	---	15.0	12.3	---	---	11.0	10.7
23	---	---	---	---	---	---	14.3	14.1	---	---	11.3	11.1
24	---	---	---	---	---	---	14.6	12.2	---	---	11.9	11.3
25	---	---	---	---	---	---	14.6	13.9	---	---	11.9	11.0
26	---	---	---	---	---	---	14.2	9.6	---	---	11.2	10.6
27	---	---	---	---	---	---	13.9	8.9	---	---	11.4	10.3
28	---	---	---	---	---	---	13.6	11.6	---	---	10.7	9.9
29	---	---	---	---	---	---	11.9	11.3	---	---	10.5	10.1
30	---	---	---	---	---	---	12.4	11.5	---	---	11.5	8.6
31	---	---	---	---	---	---	12.5	12.0	---	---	11.1	9.9
MONTH	---	---	---	---	---	---	---	---	---	---	11.9	7.3

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	10.0	10.7	9.4	9.4	7.9	8.1	6.9	10.0	7.6	7.4	5.9
2	10.5	10.1	10.2	9.3	9.4	7.8	7.9	6.8	10.2	7.3	7.0	5.8
3	11.0	10.0	10.4	9.5	9.5	7.8	8.2	6.8	9.8	7.1	7.7	5.8
4	11.0	10.1	10.8	9.4	8.8	7.8	8.2	6.6	11.0	9.4	8.0	7.0
5	10.7	10.1	10.5	9.5	8.5	7.3	8.0	6.2	9.5	8.2	7.2	6.2
6	10.5	10.2	10.0	9.7	---	---	7.8	5.8	8.3	7.4	6.9	5.6
7	10.8	9.9	9.9	9.4	---	---	7.2	5.6	7.8	7.3	6.6	5.5
8	10.8	9.7	9.9	9.4	9.8	9.3	6.8	5.0	7.6	7.1	6.7	5.3
9	10.5	9.6	10.2	9.1	11.7	8.5	6.7	4.8	7.5	7.2	7.1	6.1
10	10.5	9.9	10.1	8.8	11.2	8.9	6.8	4.5	7.2	6.3	7.5	6.4
11	10.6	9.6	9.8	6.6	11.2	8.6	7.2	6.3	7.2	6.2	8.2	6.7
12	10.3	9.1	7.9	7.6	11.3	8.1	7.5	6.2	7.1	7.0	8.0	6.2
13	9.7	8.9	9.1	7.6	11.0	8.3	7.6	6.1	7.0	6.6	8.9	7.0
14	10.0	9.2	14.5	8.7	8.3	6.3	7.5	5.9	6.8	6.3	9.4	8.3
15	10.7	9.9	10.9	10.0	7.6	6.6	7.6	5.5	6.6	5.4	9.1	8.0
16	10.8	9.8	10.3	9.2	8.4	6.8	7.7	6.5	6.0	5.0	9.2	7.7
17	10.5	9.7	9.9	8.8	8.3	7.5	7.7	6.4	5.7	4.9	7.9	4.8
18	10.3	9.5	9.3	8.2	8.5	7.6	7.5	6.3	5.3	4.6	8.2	6.9
19	10.4	9.3	10.3	7.4	8.4	8.0	7.5	6.6	5.2	4.1	7.7	6.7
20	10.3	9.2	8.3	7.6	8.7	8.1	7.7	6.7	---	---	7.7	6.4
21	10.1	9.2	8.8	7.8	9.0	7.7	8.1	6.3	---	---	8.6	6.6
22	10.3	9.6	9.2	8.2	9.3	7.8	7.9	5.5	---	---	8.2	6.8
23	10.5	9.5	9.5	8.2	9.5	8.6	7.0	5.4	---	---	7.5	6.5
24	10.3	9.5	8.9	8.0	10.5	6.1	7.3	5.6	---	---	7.4	6.1
25	10.4	9.3	8.7	8.0	9.8	6.5	7.8	6.4	---	---	7.6	6.4
26	10.3	9.3	9.3	8.4	8.6	7.2	8.0	6.5	---	---	7.7	6.2
27	10.5	9.5	9.6	8.7	8.6	7.4	8.5	6.7	8.2	7.4	7.7	6.3
28	10.1	9.1	10.0	9.1	8.0	7.3	9.3	7.0	8.8	7.6	7.0	5.8
29	10.4	9.2	9.8	8.9	8.3	7.1	9.2	6.4	8.5	7.4	6.7	5.3
30	10.7	9.6	9.4	8.3	8.1	7.0	9.0	6.9	7.8	7.1	7.6	4.7
31	---	---	9.5	8.2	---	---	9.9	7.7	7.6	6.1	---	---
MONTH	11.0	8.9	14.5	6.6	11.7	6.1	9.9	4.5	---	---	9.4	4.7
YEAR	15.0	4.1										

03201800 SANDY RUN NEAR LAKE HOPE, OHIO--Continued

TEMPERATURE (°C) OF WATER, DECEMBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	9.5	9.5	---	---	0.5	0.0	---	---
2	---	---	---	---	9.5	6.0	---	---	0.5	0.0	---	---
3	---	---	---	---	10.0	5.0	---	---	0.5	0.0	---	---
4	---	---	---	---	10.0	5.5	---	---	0.5	0.0	3.0	0.5
5	---	---	---	---	5.5	4.0	---	---	0.5	0.0	10.5	2.0
6	---	---	---	---	4.0	2.0	---	---	2.5	0.0	5.0	2.0
7	---	---	---	---	2.0	1.0	0.5	0.5	1.5	0.5	5.0	2.0
8	---	---	---	---	3.0	1.0	0.5	0.5	1.5	0.0	3.0	1.0
9	---	---	---	---	5.0	2.0	---	---	0.0	0.0	5.5	0.0
10	---	---	---	---	5.5	3.0	---	---	0.5	0.0	---	---
11	---	---	---	---	8.0	4.5	1.5	1.0	0.5	0.0	---	---
12	---	---	---	---	8.0	6.5	---	---	0.5	0.0	9.0	4.5
13	---	---	---	---	6.5	5.5	---	---	0.5	0.0	9.0	4.0
14	---	---	---	---	---	---	5.5	3.5	2.0	0.0	12.5	3.5
15	---	---	---	---	---	---	4.0	1.5	0.5	0.0	11.5	7.0
16	---	---	---	---	---	---	1.5	0.5	3.0	0.0	7.0	3.5
17	---	---	---	---	---	---	2.0	0.5	3.5	0.0	5.5	2.5
18	---	---	---	---	---	---	1.0	0.5	5.0	0.0	6.0	1.0
19	---	---	---	---	---	---	0.5	0.0	6.5	2.0	6.0	3.0
20	---	---	---	---	---	---	1.0	0.0	6.0	4.0	4.0	2.0
21	---	---	---	---	5.5	5.0	0.5	0.0	5.0	4.0	8.5	0.5
22	---	---	---	---	---	---	---	0.0	---	---	5.5	3.0
23	---	---	---	---	---	---	---	0.5	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	4.5	2.0
25	---	---	---	---	---	---	---	---	---	---	5.0	1.0
26	---	---	---	---	---	---	---	---	---	---	7.0	2.0
27	---	---	---	---	---	---	---	---	---	---	8.0	1.0
28	---	---	---	---	---	---	---	---	---	---	10.5	4.5
29	---	---	---	---	---	---	0.5	0.5	---	---	9.0	6.0
30	---	---	---	---	---	---	0.5	0.5	---	---	14.5	3.0
31	---	---	---	---	---	---	0.5	0.0	---	---	10.0	2.5
MONTH	---	---	---	---	---	---	---	---	---	---	14.5	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	6.0	14.5	7.0	20.5	14.5	23.5	21.0	22.0	16.0	23.0	16.5
2	9.0	6.0	13.5	10.0	20.5	17.0	24.0	19.5	22.0	17.5	19.5	17.5
3	10.5	3.0	11.5	8.0	21.0	17.0	23.0	17.5	21.5	19.5	19.5	18.5
4	10.0	3.5	13.5	5.5	23.0	17.0	24.0	17.5	20.0	18.0	22.0	18.5
5	10.5	5.0	12.0	8.0	24.0	18.5	24.5	18.5	19.5	17.0	23.5	19.0
6	8.0	6.0	12.5	9.5	---	---	24.5	20.5	20.5	17.0	24.0	19.5
7	10.5	3.5	12.5	10.0	---	---	27.5	19.5	20.0	16.5	24.5	19.5
8	12.0	4.0	14.0	10.5	22.0	21.0	25.5	19.0	20.5	16.5	24.5	19.5
9	12.0	5.5	15.5	8.0	21.0	17.5	24.5	20.5	21.0	17.0	25.0	18.5
10	13.0	6.0	19.0	8.0	22.0	14.0	25.0	20.0	22.0	21.0	24.5	19.0
11	14.0	5.0	14.5	9.0	23.5	16.0	21.5	20.5	22.0	20.0	21.0	19.0
12	15.5	6.5	13.0	11.5	20.5	18.5	23.0	18.0	22.0	16.5	20.5	18.5
13	17.0	10.0	11.5	9.0	23.5	18.0	22.5	18.0	22.5	16.0	19.0	17.5
14	14.0	8.5	18.0	6.5	23.0	19.0	25.0	19.5	22.5	16.0	20.0	16.0
15	13.5	5.5	16.0	10.0	19.0	17.0	25.0	17.0	21.5	17.0	21.0	15.5
16	14.5	6.5	19.5	11.0	21.0	16.5	22.5	18.5	23.5	17.5	18.5	16.5
17	14.5	9.5	21.0	11.5	21.0	15.5	22.0	18.0	24.0	16.5	18.5	16.5
18	18.0	10.0	21.5	12.5	21.5	16.5	21.0	19.5	23.0	16.0	18.0	17.0
19	18.0	9.0	21.0	14.0	23.5	18.5	22.0	19.5	24.0	17.0	18.5	17.5
20	18.5	9.5	20.0	16.0	24.5	19.0	22.5	17.5	23.0	18.0	19.0	17.5
21	13.5	10.5	19.0	13.0	22.0	20.0	23.0	15.5	24.5	19.5	17.5	14.5
22	11.5	8.0	18.0	11.5	22.0	19.0	24.5	16.0	21.5	19.5	17.5	13.0
23	13.0	6.5	17.0	10.5	22.5	17.0	24.0	17.5	25.5	19.0	17.0	15.0
24	15.0	7.5	18.0	14.0	23.5	17.5	20.5	19.0	---	---	17.0	14.0
25	16.5	7.0	17.0	15.5	24.5	18.0	22.0	19.0	---	---	15.5	11.0
26	15.0	8.5	17.5	13.5	20.0	18.0	23.5	19.5	19.5	17.5	16.5	14.5
27	12.0	7.0	16.0	13.0	21.5	18.0	22.5	18.5	21.5	18.0	18.5	16.0
28	17.0	9.5	14.0	10.0	24.0	20.0	23.5	15.5	19.0	16.0	19.5	16.5
29	12.5	9.5	14.0	11.5	24.5	20.0	24.0	19.0	20.5	16.0	21.0	17.5
30	13.5	6.5	19.5	12.5	24.0	20.0	19.0	16.5	22.0	17.0	22.0	18.5
31	---	---	20.0	12.5	---	---	21.0	17.5	22.0	16.0	---	---
MONTH	18.5	3.0	21.5	5.5	24.5	14.0	27.5	15.5	25.5	16.0	25.0	11.0
YEAR	27.5	0.0										

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO

LOCATION (revised).--Lat 38°52'25", long 82°21'22", in SE 1/4 sec.26, T.6 N., R.16 W., Gallia County, at gaging station on left bank at downstream side of U.S. Highway 35 bridge at Adamsville, 1.3 miles upstream from Ryan Run, and 1.4 miles downstream from Indian Creek.

DRAINAGE AREA.--585 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1954, October 1964 to September 1971.
Water temperatures: October 1951 to September 1954, October 1964 to September 1971.
Sediment records: Water years 1970-71 (partial-record station).

EXTREMES.--1970-71:
Specific conductance: Maximum, 950 micromhos Oct. 13; minimum, 120 micromhos Sept. 26.
Water temperatures: Maximum, 26.0°C July 9; minimum, freezing point Feb. 9-12, 14, 15.

Period of record:
Specific conductance: Maximum, 2,930 micromhos Nov. 20, 1964; minimum, 115 micromhos Mar. 23, 1952.
pH (1969-70): Maximum, 8.7 Mar. 28, 1970; minimum, 2.7 Feb. 14, 1970.
Water temperatures: Maximum, 29.0°C June 16, 1952; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since May 1967. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice a year to further define the quality of water. Prior to October 1970 gaging station was 480 ft upstream from sampling site. Sediment data for this station on page 388.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	TOTAL ACIDITY AS H+ (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)
OCT.												
13...	1800	170	0	0	260	77	.8	3.1	506	240	1.2	852
19...	1800	170	0	0	190	90	.5	4.2	448	200	.7	755
NOV.												
17...	1800	851	3	0	140	61	.4	2.9	318	160	--	540
24...	1650	468	3	0	130	31	.3	3.0	246	130	--	410
DEC.												
02...	1130	318	2	0	140	37	.4	3.9	286	140	.3	453
23...	1100	2700	3	0	77	9.8	.2	3.8	146	78	--	234
JAN.												
05...	1100	1790	2	0	93	17	.3	4.4	166	94	--	291
28...	1100	330	0	0	140	33	.6	3.0	258	130	.4	433
FEB.												
02...	1200	270	0	0	160	50	.3	3.3	308	150	.5	514
05...	1310	2300	7	0	53	12	.2	4.6	108	59	--	191
MAR.												
11...	1200	1600	3	0	84	12	.1	2.8	152	92	--	249
29...	1700	390	2	0	130	23	.2	2.1	240	120	.4	385
APR.												
06...	1325	282	2	0	150	30	.4	2.4	268	140	.4	428
29...	1100	155	0	0	170	44	.3	2.3	336	160	.5	528
MAY												
04...	1135	174	0	0	170	41	.3	2.6	322	160	.5	514
JUNE												
14...	1330	138	2	0	160	31	.3	3.7	308	150	.4	464
30...	1340	212	0	0	200	38	.4	5.2	360	180	.9	548
JULY												
05...	1900	84	0	0	170	58	.3	3.9	356	170	.6	561
15...	1800	128	0	0	180	71	.3	3.0	386	190	.8	609
AUG.												
09...	1600	260	2	0	100	29	.2	2.9	216	110	.2	329
19...	1300	54	2	0	150	48	.3	3.1	306	160	--	462
SEP.												
03...	1600	428	4	0	130	40	.2	2.7	276	150	--	432
10...	1900	74	0	0	170	76	.3	2.8	378	180	.6	594

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.		
03...	2.0	2.3
JUNE		
14...	4.0	9.8
AUG.		
03...	--	1.2

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	580	510	500	420	440	420	---	---	480	440	320	290
2	---	---	470	400	450	420	---	---	520	480	340	320
3	---	---	410	360	470	450	---	---	500	490	370	330
4	---	---	400	370	460	450	300	260	500	390	390	340
5	---	---	410	360	450	440	320	250	---	---	350	340
6	---	---	440	400	480	450	320	280	---	---	350	290
7	720	680	430	390	500	480	310	270	---	---	300	250
8	780	720	410	400	480	470	---	---	280	250	320	280
9	840	780	410	410	480	470	---	---	290	280	290	270
10	880	840	420	410	480	470	---	---	300	280	280	260
11	880	850	440	420	490	480	340	320	320	290	290	240
12	860	810	450	440	480	290	360	340	320	280	310	280
13	950	840	460	450	400	270	370	340	300	260	310	290
14	880	800	470	450	400	340	---	---	310	290	310	300
15	820	780	450	330	400	330	---	---	330	300	300	290
16	900	710	460	330	360	310	---	---	320	280	310	290
17	920	720	480	400	310	300	---	---	290	280	310	310
18	800	720	520	430	320	300	---	---	290	280	330	310
19	750	700	520	400	320	310	---	---	300	290	350	320
20	710	690	420	340	360	320	340	320	310	300	320	320
21	720	690	350	330	360	290	360	340	320	290	330	320
22	690	630	380	350	290	190	360	350	300	200	340	330
23	750	670	380	360	240	220	380	360	210	190	360	340
24	700	640	400	380	230	210	380	360	200	190	370	350
25	700	660	440	400	220	210	400	380	200	190	370	360
26	800	700	480	440	220	210	390	380	200	190	370	360
27	820	790	470	430	240	220	420	390	240	200	370	360
28	790	700	430	420	260	240	440	410	290	240	380	370
29	700	570	430	430	260	250	450	430	---	---	380	370
30	570	390	440	430	---	---	440	410	---	---	380	380
31	500	360	---	---	---	---	440	420	---	---	390	380
MONTH	950	360	520	330	500	190	---	---	520	190	390	240

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	400	390	550	540	480	460	540	500	560	520	540	500
2	420	400	550	540	480	460	520	410	550	370	530	500
3	420	410	540	530	490	470	490	430	490	340	550	330
4	450	410	530	510	510	490	550	490	480	140	460	250
5	450	430	560	530	530	510	570	550	330	150	540	390
6	440	380	560	390	520	500	610	570	420	240	680	540
7	410	360	520	430	500	500	640	610	340	320	680	620
8	440	380	430	320	500	480	630	620	330	310	620	550
9	470	410	340	250	510	500	660	560	330	310	560	540
10	470	430	260	250	500	500	610	220	360	330	590	560
11	490	440	280	250	510	500	500	220	380	360	580	520
12	490	450	290	270	520	510	690	490	390	380	520	480
13	500	450	310	230	530	500	720	590	400	390	490	470
14	480	450	300	240	500	430	600	480	420	400	480	450
15	480	450	310	290	470	420	640	490	430	420	510	480
16	480	470	340	300	540	460	640	570	440	430	510	390
17	500	480	320	280	600	540	620	600	460	440	450	400
18	490	470	320	280	600	540	600	550	460	450	470	370
19	490	470	350	310	570	540	620	280	470	460	470	370
20	490	480	370	340	580	570	620	280	480	470	520	470
21	500	480	380	360	580	570	620	590	470	470	520	500
22	520	490	390	370	580	570	620	600	470	440	500	490
23	500	480	380	370	580	560	650	600	460	440	510	500
24	510	500	400	370	560	550	620	430	470	460	510	500
25	530	510	400	380	600	560	620	490	490	460	510	500
26	530	520	390	380	630	320	540	490	500	420	530	120
27	530	510	410	390	590	420	530	520	490	420	330	190
28	510	500	430	410	620	540	570	530	560	480	400	190
29	530	510	460	430	---	---	600	570	590	530	380	330
30	540	530	480	450	560	540	690	600	530	500	400	380
31	---	---	480	460	---	---	620	550	550	530	---	---
MONTH	540	360	560	230	630	320	720	220	590	140	680	120
YEAR	950	120										

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.7	3.6	---	---	6.7	6.2	---	---	3.5	3.0	5.2	4.5
2	---	---	4.1	---	7.0	6.1	---	---	4.0	3.0	4.6	4.2
3	---	---	4.8	4.1	6.4	6.0	---	---	3.3	3.0	4.4	3.0
4	---	---	4.1	3.6	6.4	6.0	7.0	3.1	3.6	3.1	3.8	2.8
5	---	---	4.2	3.8	6.2	6.0	3.1	---	---	---	4.7	3.3
6	---	---	5.1	3.9	6.0	5.6	---	---	---	---	4.9	4.7
7	3.8	3.6	5.4	4.8	5.7	5.4	---	---	---	---	4.9	4.6
8	3.7	3.5	5.2	4.7	6.1	5.5	---	---	5.2	4.8	4.6	4.5
9	3.7	3.5	5.1	4.7	6.1	5.7	---	---	5.1	4.7	5.0	4.4
10	3.6	3.3	5.2	4.9	6.4	5.7	---	---	5.2	4.7	4.8	4.6
11	3.7	3.4	5.3	5.0	6.3	5.9	5.0	4.6	5.3	4.9	4.8	4.7
12	3.8	3.2	5.3	5.3	7.4	6.3	4.7	4.4	5.4	4.9	4.9	4.6
13	3.6	2.9	5.4	5.3	7.3	6.0	5.0	4.5	5.3	4.0	5.0	4.8
14	3.7	3.2	5.4	5.3	6.1	5.7	---	---	4.9	4.1	5.1	4.7
15	3.8	3.6	6.4	5.4	6.1	5.8	---	---	4.9	4.8	5.1	5.0
16	3.6	3.2	6.3	5.0	6.1	5.6	---	---	5.1	4.8	5.0	4.5
17	3.5	3.0	5.5	4.8	6.2	6.1	---	---	5.2	4.8	4.7	4.5
18	3.8	3.2	5.6	5.4	6.3	6.0	---	---	5.2	4.7	4.8	4.3
19	3.7	3.3	5.9	5.5	6.6	6.1	---	---	5.4	4.8	4.8	4.2
20	3.4	3.2	6.3	5.6	6.5	6.1	5.0	4.0	5.7	5.3	4.6	4.4
21	3.9	3.4	6.3	5.8	6.8	6.1	4.0	3.8	5.4	5.3	5.1	4.4
22	4.1	3.6	5.8	5.5	7.5	6.8	4.1	3.8	5.4	4.9	5.1	4.8
23	3.6	3.1	5.7	5.3	7.2	6.7	4.3	4.0	5.4	5.0	4.9	4.4
24	---	---	5.4	5.2	6.7	6.2	4.3	4.0	5.4	5.2	4.8	4.4
25	---	---	5.3	5.0	6.3	5.8	4.8	4.2	5.6	5.0	4.9	4.3
26	---	---	5.9	5.2	5.8	5.6	4.8	4.0	5.6	5.1	5.0	4.7
27	---	---	6.5	5.9	5.6	5.4	4.5	3.7	5.6	5.4	5.1	4.6
28	---	---	6.7	6.2	5.7	5.3	4.9	3.2	5.5	5.0	5.2	4.8
29	---	---	6.5	6.1	5.7	5.6	3.5	3.2	---	---	5.0	4.6
30	---	---	6.8	6.3	---	---	3.6	3.3	---	---	4.9	4.3
31	---	---	---	---	---	---	3.3	3.1	---	---	5.0	4.4
MONTH	---	---	6.8	3.6	7.5	5.3	---	---	5.7	3.0	5.2	2.8

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.8	4.6	---	---	---	---	4.3	3.8	4.9	4.3	6.1	4.1
2	4.8	4.1	---	---	---	---	4.6	3.8	5.6	4.4	4.8	4.3
3	4.6	3.7	---	---	---	---	4.6	4.0	5.7	4.8	6.1	4.4
4	4.7	3.6	---	---	---	---	4.6	3.8	5.7	4.9	5.9	5.0
5	4.6	3.9	---	---	---	---	4.5	3.9	5.6	4.5	5.9	4.4
6	---	4.0	---	---	---	---	4.4	4.1	5.1	4.2	6.0	4.4
7	---	---	---	---	---	---	4.7	3.9	5.0	4.2	5.3	4.3
8	---	---	---	---	---	---	4.6	4.0	5.2	4.3	5.8	4.2
9	---	---	---	---	---	---	4.5	4.1	5.3	4.4	5.8	4.2
10	---	---	---	---	---	---	5.6	4.3	5.4	4.7	6.0	4.3
11	---	---	---	---	---	---	5.6	4.6	5.3	5.0	4.9	4.3
12	---	---	---	---	---	---	4.6	3.9	5.5	4.6	5.0	4.5
13	---	---	---	---	---	---	4.2	3.5	5.6	4.6	4.6	4.0
14	---	---	---	---	4.8	3.7	4.4	3.9	5.9	4.8	5.7	4.1
15	---	---	---	---	4.6	4.4	4.6	3.8	5.9	4.9	6.0	3.7
16	---	---	---	---	4.6	4.0	4.7	4.1	5.9	5.2	5.3	3.8
17	---	---	---	---	4.5	3.5	4.7	4.0	6.0	5.1	5.3	4.5
18	---	---	---	---	4.6	3.8	4.5	4.1	5.9	5.2	4.9	4.2
19	---	---	---	---	4.8	4.1	5.6	4.1	6.4	5.1	5.2	4.7
20	---	---	---	---	4.8	4.2	5.6	4.4	6.6	5.0	4.8	4.3
21	---	---	---	---	4.6	4.1	4.7	4.0	5.8	5.4	5.1	3.7
22	---	---	---	---	4.4	4.1	4.7	3.9	6.5	5.7	5.1	3.4
23	---	---	---	---	4.6	3.8	4.4	4.0	6.8	5.9	4.8	4.0
24	---	---	---	---	4.5	3.7	5.0	4.2	6.7	4.7	5.0	3.4
25	---	---	---	---	4.4	3.6	4.9	4.2	6.7	4.7	5.1	2.9
26	---	---	---	---	5.4	3.5	5.1	4.5	6.9	5.3	6.5	4.2
27	---	---	---	---	4.3	3.6	4.9	4.5	6.5	4.6	7.0	5.4
28	---	---	---	---	4.0	3.3	4.9	4.1	5.0	3.9	6.3	5.1
29	---	---	---	---	---	---	4.7	4.4	5.4	3.6	6.4	4.5
30	---	---	---	---	4.3	4.0	4.4	4.2	5.8	3.9	6.4	4.8
31	---	---	---	---	---	---	4.9	4.4	5.9	4.2	---	---
MONTH	---	---	---	---	---	---	5.6	3.5	6.9	3.6	7.0	2.9

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	6.3	---	---	---	---	---	---	9.2	7.6	9.9	9.4
2	---	---	---	---	---	---	---	---	8.9	---	9.9	9.7
3	---	---	---	---	---	---	---	---	---	---	10.4	9.9
4	---	---	---	---	---	---	12.1	10.6	---	---	11.1	10.1
5	---	---	---	---	---	---	10.9	10.4	---	---	11.9	11.1
6	---	---	---	---	---	---	10.7	8.6	---	---	11.9	11.4
7	---	---	---	---	---	---	9.2	8.6	---	---	11.5	11.3
8	---	---	---	---	---	---	---	---	13.2	11.7	11.6	11.5
9	---	---	---	---	---	---	---	---	11.7	10.5	11.8	11.6
10	---	---	---	---	---	---	---	---	11.0	10.1	11.9	11.6
11	---	---	---	---	---	---	11.8	11.0	10.7	9.9	11.8	10.4
12	---	---	---	---	---	---	11.0	10.3	10.1	9.7	10.7	10.2
13	---	---	---	---	---	---	10.3	9.7	10.2	10.0	10.5	9.6
14	---	---	---	---	---	---	---	---	10.5	10.0	9.8	9.2
15	---	---	---	---	---	---	---	---	10.5	10.3	9.6	8.7
16	---	---	---	---	---	---	---	---	10.5	10.2	9.1	8.8
17	---	---	---	---	---	---	---	---	10.2	9.9	9.3	9.0
18	---	---	---	---	---	---	---	---	10.2	9.8	9.4	9.2
19	---	---	---	---	---	---	---	---	10.1	9.7	9.3	9.2
20	---	---	---	---	---	---	12.7	11.6	9.9	9.6	9.4	9.3
21	---	---	---	---	---	---	12.1	10.7	9.8	9.6	9.7	9.3
22	---	---	---	---	---	---	10.7	9.8	10.2	9.3	9.6	9.3
23	---	---	---	---	---	---	9.8	7.8	9.6	9.4	10.3	9.4
24	---	---	---	---	---	---	7.9	7.4	9.8	9.6	10.5	10.1
25	---	---	---	---	---	---	7.4	6.9	10.2	9.8	10.6	10.3
26	---	---	---	---	---	---	6.9	6.6	10.1	9.7	10.6	10.0
27	---	---	---	---	---	---	7.2	6.8	10.0	9.6	10.4	10.1
28	---	---	---	---	---	---	9.9	7.0	9.8	9.3	10.2	9.7
29	---	---	---	---	---	---	9.8	9.4	---	---	10.1	9.8
30	---	---	---	---	---	---	9.4	9.2	---	---	10.3	10.0
31	---	---	---	---	---	---	9.3	9.1	---	---	10.4	10.1
MONTH	---	---	---	---	---	---	---	---	13.2	7.6	11.9	8.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.2	10.0	15.0	13.6	---	---	5.6	5.2	8.9	8.0	7.7	6.4
2	10.8	8.8	13.9	13.5	---	---	5.6	5.1	8.6	8.0	6.8	6.1
3	9.7	9.2	14.4	13.6	---	---	6.0	5.2	9.1	8.0	6.8	6.0
4	10.5	9.7	15.0	14.1	---	---	6.2	5.3	8.4	7.8	6.8	5.9
5	11.2	10.3	14.7	14.1	---	---	6.2	5.4	8.8	7.8	6.8	5.6
6	12.8	10.4	14.6	14.1	---	---	5.9	5.5	9.0	8.2	6.5	5.3
7	10.8	10.3	14.5	14.0	---	---	6.0	5.4	9.3	7.8	6.4	4.1
8	11.0	10.5	14.3	13.8	---	---	6.0	5.5	9.9	7.9	6.3	5.3
9	10.9	10.3	14.4	13.6	---	---	5.9	5.3	10.0	8.2	6.3	5.2
10	10.8	10.3	14.0	13.3	---	---	6.1	5.2	9.6	8.2	6.2	5.1
11	11.1	10.3	13.6	13.1	---	---	6.2	5.6	8.9	7.7	5.6	5.0
12	11.0	10.3	13.3	13.0	---	---	6.9	5.8	9.5	7.3	6.0	5.2
13	10.4	9.5	14.2	13.1	---	---	6.8	6.2	9.3	7.1	6.7	5.5
14	10.9	9.5	14.9	13.9	7.6	5.6	6.7	6.2	9.1	6.9	10.4	6.5
15	11.6	10.1	14.5	14.0	5.9	5.4	7.0	6.2	8.9	7.6	10.3	9.3
16	12.7	11.1	14.4	13.7	6.1	5.3	6.9	6.3	8.0	6.8	9.8	9.2
17	12.9	11.8	14.2	13.2	6.0	5.9	7.1	6.1	8.2	6.5	10.1	9.3
18	13.0	12.1	13.6	12.5	5.9	5.2	7.0	6.3	7.8	6.2	9.8	9.2
19	13.3	12.1	12.8	11.9	5.7	5.1	7.4	6.2	8.1	6.2	9.5	9.0
20	13.4	12.0	12.2	11.6	5.7	4.9	7.6	6.2	7.2	6.1	9.4	8.8
21	13.0	12.2	12.3	11.5	5.4	4.8	7.9	7.0	6.7	5.8	9.7	8.9
22	14.2	13.0	13.5	11.7	5.7	4.7	8.0	7.1	6.0	5.4	9.7	9.0
23	14.5	13.7	13.5	11.7	6.0	4.9	7.7	7.2	5.8	5.5	9.7	8.9
24	14.7	13.9	12.6	12.0	5.7	4.9	7.7	7.1	7.2	5.5	10.0	8.7
25	15.0	14.1	12.5	11.8	5.9	5.2	8.0	7.5	8.5	6.7	9.9	9.5
26	14.7	13.8	13.4	11.6	6.2	5.5	8.0	7.4	8.0	6.9	10.3	8.7
27	14.6	14.0	12.0	7.3	6.3	5.6	8.0	7.3	8.0	6.8	9.5	8.8
28	14.2	13.3	9.3	7.9	6.0	5.6	8.1	7.3	7.8	6.7	8.8	8.1
29	14.3	13.2	9.2	8.3	---	---	8.2	7.5	7.5	6.4	8.3	8.0
30	14.6	13.8	9.0	8.1	5.9	5.3	8.0	7.4	8.0	6.2	8.0	7.8
31	---	---	8.5	7.4	---	---	8.8	7.8	8.1	6.8	---	---
MONTH	15.0	8.8	15.0	7.3	---	---	8.8	5.1	10.0	5.4	10.4	4.1

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	15.5	14.0	14.0	9.0	8.0	---	---	2.0	0.5	7.0	5.5
2	---	---	14.0	14.0	9.0	8.5	---	---	4.5	0.5	7.0	6.5
3	---	---	14.0	12.0	8.5	8.0	---	---	1.0	0.5	7.0	5.0
4	---	---	12.0	11.0	8.5	8.0	4.0	3.0	1.0	1.0	5.0	4.0
5	---	---	11.0	10.5	8.0	6.5	4.0	3.5	---	---	4.0	3.0
6	---	---	10.5	10.0	6.5	4.5	4.0	3.0	---	---	5.0	3.0
7	15.0	14.5	10.5	9.5	4.5	4.0	6.0	3.0	---	---	5.0	4.5
8	15.5	14.5	10.0	9.0	4.0	3.5	---	---	0.5	0.5	4.5	3.5
9	16.5	15.5	10.5	9.0	4.0	3.5	---	---	1.0	0.0	3.5	3.0
10	16.5	15.5	11.0	10.0	4.0	4.0	---	---	1.5	0.0	4.0	3.5
11	15.5	15.5	11.0	10.5	5.5	4.0	1.0	0.5	1.0	0.0	4.0	3.5
12	16.5	15.5	11.0	11.0	8.0	5.5	1.5	1.0	0.5	0.0	5.0	4.0
13	17.0	16.0	11.5	11.0	7.0	6.0	3.0	1.5	0.5	0.5	6.0	5.0
14	17.0	16.5	11.5	11.0	6.0	5.5	---	---	1.0	0.0	8.0	6.0
15	17.0	16.5	11.0	9.0	5.5	5.0	---	---	0.5	0.0	9.5	8.0
16	16.5	15.0	9.0	7.5	5.0	4.5	---	---	1.0	0.5	9.5	8.5
17	15.0	13.5	7.5	6.5	5.0	5.0	---	---	2.0	0.5	8.5	7.0
18	13.5	11.5	6.5	6.0	5.0	4.5	---	---	2.0	1.0	7.0	6.0
19	12.0	11.0	6.5	6.0	6.0	5.0	---	---	3.0	1.5	7.0	6.5
20	11.5	11.0	8.0	6.5	5.5	5.5	1.5	0.5	4.0	3.0	6.5	5.5
21	12.0	11.5	7.5	6.5	5.5	5.0	1.0	0.5	4.5	4.0	6.5	5.0
22	13.0	12.0	6.5	6.0	6.5	5.0	1.5	1.0	6.5	4.5	6.5	6.0
23	13.0	12.0	6.0	4.0	7.5	6.5	2.0	1.5	6.5	5.0	6.5	5.5
24	13.0	12.0	4.0	2.0	7.0	6.0	3.0	1.5	5.0	4.5	5.5	4.5
25	13.5	13.0	2.0	1.5	6.0	4.5	4.0	3.0	4.5	3.5	5.5	4.0
26	14.0	13.0	3.0	2.0	4.5	3.5	4.5	3.5	5.0	4.0	6.0	5.0
27	14.0	13.5	4.5	3.0	3.5	2.5	5.5	2.0	6.0	4.5	7.0	5.0
28	14.0	13.0	6.0	4.5	3.5	1.5	4.5	0.5	6.0	5.5	9.0	6.5
29	14.0	13.5	7.0	5.5	3.5	2.5	1.0	0.5	---	---	10.0	9.0
30	14.0	14.0	8.0	7.0	---	---	1.0	0.5	---	---	9.5	8.0
31	14.0	14.0	---	---	---	---	1.0	0.5	---	---	10.0	8.0
MONTH	17.0	11.0	14.0	1.5	9.0	1.5	---	---	6.5	0.0	10.0	3.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	9.0	14.0	12.0	19.5	17.5	25.0	24.5	21.0	20.5	21.5	20.0
2	10.5	9.0	14.5	13.5	20.0	19.0	25.0	24.0	21.5	20.5	21.5	21.0
3	9.5	8.0	13.5	12.5	21.0	19.5	24.5	22.5	21.5	21.0	21.0	20.0
4	9.5	8.0	13.0	11.0	22.0	20.0	25.0	23.0	21.5	19.5	20.5	20.0
5	9.5	8.5	13.0	12.0	23.5	21.0	25.0	23.5	19.5	18.5	21.0	20.0
6	9.5	9.0	13.5	12.0	23.5	21.5	24.5	24.0	20.0	19.5	22.0	21.0
7	9.5	8.0	13.5	13.0	23.5	22.0	25.5	23.5	20.0	19.5	22.5	21.5
8	10.5	8.5	13.5	13.0	24.0	22.0	25.5	24.0	20.0	19.0	22.5	21.5
9	11.0	9.0	13.5	12.5	23.5	21.0	26.0	24.5	20.5	19.5	22.5	21.5
10	11.5	10.0	14.5	13.0	21.0	19.0	25.5	23.5	21.0	20.0	22.0	21.5
11	12.0	10.0	14.5	14.0	21.0	19.5	24.0	22.5	21.5	20.5	22.5	21.5
12	13.0	10.5	15.0	14.5	21.0	20.5	23.5	22.0	21.0	19.5	21.5	21.0
13	14.5	12.5	14.5	12.0	21.0	20.0	23.0	22.0	21.0	19.5	21.0	19.5
14	14.0	13.0	13.0	11.0	22.0	19.5	24.0	22.0	20.5	19.0	19.5	18.5
15	14.0	12.0	13.5	12.5	22.0	21.0	24.0	22.0	21.0	19.5	19.5	18.5
16	13.5	12.0	16.0	13.0	21.5	20.5	24.5	22.5	21.5	20.5	19.5	18.5
17	14.0	13.0	17.0	14.5	21.5	20.0	24.0	22.5	21.5	20.0	18.5	18.5
18	14.5	13.5	19.0	16.5	22.5	20.5	23.5	23.0	21.5	20.5	18.5	18.0
19	15.0	13.5	19.5	17.5	23.5	21.0	23.0	22.0	21.5	20.5	19.0	18.0
20	16.0	14.0	19.5	18.5	24.0	22.0	22.5	21.5	22.0	20.5	19.0	18.5
21	15.5	14.0	19.5	18.5	23.5	23.0	22.0	21.0	22.0	21.0	19.0	18.0
22	14.0	13.0	19.0	17.5	23.5	23.0	22.5	21.0	22.0	21.5	18.5	17.0
23	13.5	12.0	18.5	16.5	23.5	21.5	22.5	21.5	22.0	21.0	18.0	17.0
24	13.5	11.5	18.5	17.0	24.0	21.5	22.0	21.5	21.5	19.5	17.5	16.5
25	14.0	13.5	19.0	18.0	24.0	22.0	22.5	21.5	20.5	19.0	17.0	15.5
26	14.5	12.0	18.5	17.0	24.0	21.0	23.5	21.5	20.5	19.5	17.5	16.5
27	13.5	12.0	18.5	17.0	23.5	21.0	23.0	21.5	20.5	19.5	19.0	17.5
28	15.5	12.5	17.0	16.0	24.0	22.0	23.0	21.0	19.5	19.0	19.5	18.5
29	14.5	13.0	16.5	15.5	---	---	23.0	22.0	20.0	18.5	20.0	19.0
30	14.0	12.0	17.5	16.0	25.5	24.5	22.0	21.0	20.5	19.0	20.5	19.5
31	---	---	18.5	16.5	---	---	21.5	20.5	21.5	19.5	---	---
MONTH	16.0	8.0	19.5	11.0	25.5	17.5	26.0	20.5	22.0	18.5	22.5	15.5
YEAR	26.0	0.0										

No Type

03219800 MILL CREEK AT MARYSVILLE, OHIO

LOCATION.--Lat 40°14'38", long 83°21'19", Union County, at bridge on Cherry Street in Marysville, 0.6 mile north of intersection with U.S. Highway 33, and 800 ft downstream from unnamed left bank tributary.

DRAINAGE AREA.--87.7 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1970 to June 1971 (discontinued).

REMARKS.--No discharge records available.

CHEMICAL ANALYSES, OCTOBER 1970 TO JUNE 1971

DATE	TIME	NITRITE (NO2) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)
OCT. 27...	1330	20	3.5	15	1360	7.3	17.0
NOV. 24...	1330	.40	3.5	29	1280	--	3.5
DEC. 21...	1400	1.9	36	.93	682	--	2.5
JAN. 19...	1300	4.2	11	7.0	846	--	2.0
FEB. 18...	1230	.20	5.8	.76	213	7.4	1.0
MAR. 15...	1120	.34	29	.74	455	7.6	8.5
APR. 13...	1300	2.8	11	3.4	844	--	16.0
MAY 12...	1330	.16	14	.29	621	--	14.5
JUNE 08...	1300	3.9	19	4.8	784	--	24.0

DATE	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	CYANIDE (CN) (MG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
OCT. 27...	18	69000	150000	.01	--	240
NOV. 24...	10	30000	120000	.13	--	280
DEC. 21...	4.8	15000	57000	.03	--	160
JAN. 19...	2.0	6600	9400	.10	--	140
FEB. 18...	8.2	1900	9400	.02	--	10
MAR. 15...	2.4	2400	30000	.01	--	100
APR. 13...	4.0	640	12000	.02	--	17
MAY 12...	2.6	1500	38000	.01	6	5
JUNE 08...	4.4	2200	60000	.04	0	47

no tape

03220000 MILL CREEK NEAR BELLEPOINT, OHIO

LOCATION.--Lat 40°14'54", long 83°10'26", Delaware County, at gaging station on left bank at upstream side of county road bridge, 1.2 miles west of Bellepoint, 1.8 miles upstream from mouth, and 2.3 miles downstream from Blues Creek.

DRAINAGE AREA.--178 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1966-69 (partial-record station), July 1970 to June 1971; July to September 1971 (partial-record station).
Water temperatures: July 1970 to September 1971.

REMARKS.--Duirnal fluctuation caused by stone quarry upstream from station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	CHLO-RIDE (CL) (MG/L)	NITRITE (NO2) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	TOTAL ACIDITY AS H+ (MG/L)
OCT.									
15...	1100	13	260	0	46	.05	5.3	3.1	.2
27...	1030	7.0	278	0	38	.05	4.2	3.3	.2
NOV.									
12...	1420	7.2	278	0	32	.60	17	5.3	.2
24...	1015	10	296	0	42	4.0	23	6.9	.2
DEC.									
10...	1045	8.6	266	0	50	.08	28	6.4	.1
21...	1030	43	166	0	30	.08	34	1.1	.1
JAN.									
05...	1050	720	134	0	16	.09	20	2.3	.1
19...	1100	20	306	0	34	3.9	13	1.9	.1
FEB.									
02...	1105	16	445	0	74	20	13	3.6	.2
18...	1000	600	80	0	51	2.1	13	2.6	.1
MAR.									
03...	1400	146	180	0	30	.01	27	.03	.1
15...	1030	491	124	0	21	.49	39	.43	.1
APR.									
01...	0930	40	246	0	32	.03	15	.72	.0
13...	0945	21	270	0	36	.41	3.5	.89	.0
26...	1015	17	276	12	35	.56	.8	1.2	.0
MAY									
12...	0930	92	210	0	24	.40	29	.70	.1
25...	1000	28	260	0	8.0	.17	6.4	1.0	.2
JUNE									
08...	1000	21	246	0	24	.38	10	1.6	.1
24...	1400	4.0	258	0	40	.01	19	1.0	.3
JULY									
15...	1415	9.2	--	--	43	--	2.4	--	--
AUG.									
19...	1520	1.1	292	0	48	--	1.7	1.4	--

DATE	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-EPATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	IMME-DIATE COLI-FORM (COL. PER 100 ML)
OCT.								
15...	1330	7.7	15.5	7.4	73	2.2	320	5200
27...	1110	7.8	13.0	8.8	83	6.6	80	5600
NOV.								
12...	1190	7.8	11.5	10.4	94	2.4	40	1100
24...	1320	7.8	.5	14.0	97	1.2	740	3700
DEC.								
10...	1210	7.7	3.0	14.4	107	2.1	16	360
21...	679	7.9	2.5	13.0	96	4.6	1200	9600
JAN.								
05...	435	7.7	.5	13.6	94	11	5000	34000
19...	954	7.9	.0	13.6	93	.6	70	360
FEB.								
02...	1580	7.7	.0	14.2	97	4.4	4	200
18...	426	7.4	.5	11.6	80	8.2	8000	26000
MAR.								
03...	635	7.4	2.5	12.0	88	.0	32	800
15...	459	7.5	9.0	10.0	86	1.0	0	4000
APR.								
01...	744	8.2	9.5	11.6	102	.8	44	360
13...	886	8.3	14.5	9.2	89	2.4	170	170
26...	992	8.5	12.0	9.0	83	4.6	52	120
MAY								
12...	639	7.9	15.5	7.8	77	1.6	360	4000
25...	783	7.8	18.0	6.2	65	2.2	0	1400
JUNE								
08...	681	7.9	23.0	5.0	57	1.2	0	1200
24...	836	7.6	16.5	7.0	71	3.0	270	1600
JULY								
15...	915	7.6	25.0	--	--	--	--	--
AUG.								
19...	1100	7.6	24.0	--	--	--	--	--

03220000 MILL CREEK NEAR BELLEPOINT, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	11.0	12.5	11.0	9.0	6.0	0.5	0.5	0.5	0.0	4.0	3.0
2	14.5	11.5	12.0	10.5	8.5	6.5	0.5	0.5	0.5	0.0	4.5	3.5
3	14.5	13.0	11.0	9.5	8.0	6.0	0.5	0.5	0.5	0.5	4.0	1.5
4	13.5	10.5	9.5	9.0	8.0	5.5	0.5	0.5	0.5	0.0	1.5	0.0
5	13.5	10.5	9.0	8.5	5.5	3.0	0.5	0.5	0.0	0.0	1.5	0.5
6	14.5	12.5	9.5	8.0	3.0	2.0	0.5	0.5	0.0	0.0	2.5	2.0
7	14.5	13.5	10.0	7.5	2.0	1.5	0.5	0.5	0.0	0.0	2.5	1.5
8	16.5	14.5	9.5	7.5	2.5	1.5	0.5	0.5	0.5	0.0	1.5	1.0
9	18.5	15.5	11.0	8.5	4.0	2.0	0.5	0.5	0.5	0.5	2.0	0.5
10	18.5	15.0	11.0	10.5	4.0	2.5	0.5	0.0	1.0	0.5	2.0	1.5
11	15.0	13.5	11.5	10.5	4.5	3.5	0.5	0.0	0.5	0.0	2.0	1.5
12	15.0	14.5	11.5	11.0	5.0	4.5	0.5	0.5	0.0	0.0	5.0	2.5
13	17.0	15.0	11.0	10.0	4.5	4.0	0.5	0.5	0.5	0.0	5.0	4.0
14	17.5	16.5	10.0	6.5	4.0	3.0	0.5	0.0	1.0	0.5	7.0	4.0
15	17.0	14.0	6.5	5.0	3.0	1.5	0.5	0.5	0.5	0.5	9.0	7.0
16	14.0	11.5	5.5	4.0	2.0	1.5	0.5	0.5	0.5	0.0	8.5	6.0
17	11.5	9.5	5.0	3.5	2.5	2.0	0.5	0.5	0.5	0.0	6.0	4.5
18	11.5	9.0	5.5	3.5	3.0	2.5	1.0	0.5	0.5	0.5	4.5	3.5
19	11.5	9.0	5.5	4.0	3.5	3.0	0.5	0.0	0.5	0.5	4.5	4.0
20	11.5	10.5	6.5	5.5	3.5	3.0	0.5	0.0	0.5	0.5	4.0	3.5
21	12.0	11.5	6.0	4.5	3.5	2.0	0.0	0.0	0.0	0.0	5.5	2.0
22	13.5	12.0	5.5	4.5	3.0	2.0	0.0	0.0	1.5	0.5	5.5	4.5
23	13.5	11.0	4.5	1.0	3.5	3.0	0.0	0.0	1.5	1.0	4.5	3.5
24	13.0	11.0	1.0	1.0	3.0	1.0	0.0	0.0	1.0	1.0	4.5	2.0
25	14.5	12.0	1.0	1.0	1.0	0.5	0.0	0.0	2.5	0.5	5.0	3.0
26	14.0	11.5	1.5	1.0	0.5	0.5	0.0	0.0	3.5	2.5	7.0	4.0
27	15.0	13.0	3.0	1.5	0.5	0.5	0.0	0.0	4.5	3.5	7.0	4.5
28	14.5	13.5	4.5	3.0	0.5	0.5	0.0	0.0	4.0	2.5	9.0	6.5
29	14.0	13.0	6.0	4.5	0.5	0.5	0.0	0.0	---	---	9.0	7.0
30	13.0	12.5	7.0	6.0	0.5	0.5	0.0	0.0	---	---	9.0	5.5
31	13.5	12.0	---	---	0.5	0.5	0.5	0.0	---	---	10.0	6.0
MONTH	18.5	9.0	12.5	1.0	9.0	0.5	1.0	0.0	4.5	0.0	10.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	9.0	14.5	9.5	24.0	20.0	28.0	25.5	24.5	20.0	23.5	21.5
2	9.5	8.0	13.5	11.5	24.5	21.0	27.0	24.0	24.5	21.5	24.0	22.0
3	9.5	5.5	14.0	10.0	25.5	21.5	27.0	23.5	24.5	23.0	23.5	22.5
4	9.5	6.5	14.5	10.0	25.5	22.0	27.5	23.5	23.5	22.0	24.5	22.0
5	9.5	7.0	13.5	11.5	27.0	23.5	27.5	25.0	24.0	20.0	25.5	23.0
6	9.0	5.5	14.5	13.0	26.5	24.0	29.0	24.5	25.0	20.0	25.0	23.0
7	10.5	6.0	14.5	13.0	27.5	24.0	29.0	23.5	25.0	20.5	25.5	22.5
8	12.5	8.0	14.0	11.5	27.0	24.0	29.0	25.0	25.5	21.5	26.0	22.5
9	13.5	10.0	15.0	12.0	24.5	21.5	29.5	26.0	26.0	21.5	26.0	23.0
10	14.0	10.0	17.0	13.0	25.5	19.5	27.5	25.5	27.0	23.5	26.0	23.0
11	15.0	10.0	17.0	14.5	26.0	21.0	27.5	25.0	27.0	24.0	25.0	23.0
12	17.0	11.5	15.0	14.0	26.0	23.0	29.0	23.0	25.5	21.5	23.5	21.5
13	16.5	14.0	14.0	12.0	26.5	23.0	28.0	24.5	25.0	20.5	23.0	20.5
14	15.0	11.5	15.5	11.5	26.5	23.0	28.5	24.0	25.0	20.5	22.0	19.0
15	14.5	11.0	17.5	14.0	26.0	24.5	27.5	25.0	24.5	23.0	22.0	19.5
16	16.5	11.5	20.5	16.0	27.0	23.0	27.5	23.0	26.0	21.5	21.0	19.0
17	16.5	14.0	22.0	16.5	27.5	22.0	27.0	24.0	25.0	20.5	20.5	18.5
18	19.0	14.5	23.5	18.5	28.5	22.0	25.0	21.5	25.0	21.0	20.0	18.0
19	19.0	14.0	23.5	20.0	28.0	24.0	25.5	23.0	26.0	24.0	20.0	18.5
20	20.5	14.5	23.0	19.5	30.0	24.0	25.0	21.5	25.0	23.0	19.5	18.0
21	18.0	13.5	21.5	18.0	29.0	25.5	26.0	20.5	26.5	24.0	18.5	16.0
22	15.0	12.0	21.0	16.5	28.5	23.0	26.5	21.5	26.5	23.5	18.0	15.5
23	16.5	11.5	21.0	16.0	28.0	22.0	26.5	22.0	26.5	23.5	18.5	16.0
24	16.5	12.0	21.0	18.0	28.0	23.5	26.0	23.0	24.5	20.0	19.0	15.5
25	17.0	12.0	20.5	17.5	28.0	22.0	24.5	22.0	24.0	21.5	16.5	14.0
26	15.0	12.0	17.5	16.0	22.5	20.5	26.0	22.5	25.0	21.5	18.0	15.5
27	13.5	10.5	16.5	15.0	24.5	22.5	25.0	21.5	24.0	22.0	19.5	17.5
28	15.5	11.5	17.0	14.0	27.0	24.0	25.0	20.5	22.5	20.5	21.0	18.5
29	14.0	11.5	19.5	15.5	27.0	25.0	26.0	22.5	23.5	20.5	22.5	19.5
30	13.0	10.0	22.5	16.5	28.0	25.5	24.5	21.5	23.0	20.5	22.0	20.5
31	---	---	24.5	18.0	---	---	25.0	20.5	23.5	21.0	---	---
MONTH	20.5	5.5	24.5	9.5	30.	19.5	29.5	20.5	27.0	20.0	26.0	14.0
YEAR	30.0	0.0										

03229600 SCIOTO RIVER BELOW SHADEVILLE, OHIO

LOCATION.--Lat 39°47'37", long 83°00'40", Pickaway County, on left bank at Picway Plant of Columbus and Southern Ohio Electric Company, 0.4 mile downstream from Big Walnut Creek, and 3.2 miles downstream from Shadeville.

DRAINAGE AREA.--2,266 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1965 to September 1971.
Water temperatures: March 1965 to September 1971.

EXTREMES.--1970-71:
Dissolved oxygen: Maximum, 14.2 mg/l Apr. 11; minimum, 0.0 mg/l June 26.

Period of record:
Specific conductance (1965-69): Maximum, 1,260 micromhos Feb. 9, 1966; minimum, 190 micromhos May 27, 1968.
Dissolved oxygen (1965-68, 1970-71): Maximum, 14.6 mg/l Dec. 24, 1967; minimum, 0.0 mg/l on many days during May 1965, June 1966, June to August 1967, June to September 1968, and June 26, 1971.
Water temperatures (1965-69): Maximum, 33.0°C Aug. 16, 1965; minimum, freezing point on several days during December 1967 to March 1968, January 1969.

REMARKS.--Continuous water-quality recorder operated since March 1965. Maximum recorded specific conductance value of 1,270 micromhos occurred Feb. 1, 1971. Maximum recorded dissolved oxygen concentration of 15.0 mg/l occurred Feb. 7-11, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, daily samples were collected by a local observer. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.												
19...	0850	189	0	110	44	1.0	24	414	260	100	709	8.1
29...	0900	181	0	160	60	3.9	38	530	290	140	891	7.5
NOV.												
04...	1400	176	0	94	35	.5	18	334	210	66	555	7.0
12...	0830	210	0	160	62	1.8	16	524	300	130	895	6.9
DEC.												
23...	0730	146	0	81	36	.4	12	356	210	90	528	7.1
31...	0800	220	0	150	49	1.0	19	536	320	140	812	7.0
JAN.												
05...	0800	122	0	72	32	.5	12	278	180	80	455	8.0
28...	1210	218	10	160	74	1.6	16	572	340	140	910	8.4
FEB.												
05...	0800	143	0	91	210	.5	14	614	220	100	1090	8.0
23...	1100	90	0	46	23	.2	10	210	130	56	324	7.8
MAR.												
01...	0800	126	0	72	27	.4	24	282	190	87	454	8.0
31...	0910	183	7	140	42	.7	33	442	300	140	720	8.3
APR.												
01...	1200	204	0	120	42	.9	16	472	310	140	726	7.1
30...	0800	204	0	150	60	1.2	17	534	320	150	853	6.8
MAY												
06...	1035	180	0	160	57	.8	43	554	310	160	872	8.1
10...	1033	145	0	82	30	.3	34	340	240	120	549	6.9
JUNE												
25...	0800	179	0	170	53	1.6	49	548	310	160	902	8.2
28...	0800	162	0	94	26	.4	31	338	250	120	553	8.2
JULY												
09...	1230	186	0	150	65	.6	21	496	280	130	851	8.0
26...	0930	148	0	78	31	.4	11	262	200	79	488	8.1
AUG.												
20...	1015	182	0	140	64	1.0	38	566	300	150	913	8.1
27...	1100	136	0	81	37	.5	9.9	308	200	88	511	8.0
SEP.												
07...	0800	164	0	91	37	1.2	23	348	210	76	558	8.1
17...	0850	240	0	120	63	1.0	43	558	290	93	892	8.2

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED LEAD (PE) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.								
15...	10	10	0	5	2	1	.6	20
JUNE								
04...	12	--	--	--	--	--	[illegible]	--

SCIOTO RIVER BASIN

03229600 SCIOTO RIVER BELOW SHADEVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	820	760	840	780	1270	1100	---	---
2	---	---	770	430	810	760	820	770	1100	1000	---	---
3	---	---	630	350	840	750	830	770	1120	1020	---	---
4	---	---	560	420	820	720	740	450	1120	938	---	---
5	860	800	640	550	810	730	600	420	1140	554	---	---
6	840	780	680	630	800	730	660	580	587	545	---	---
7	810	720	720	640	770	710	690	610	671	587	---	---
8	840	730	760	660	840	750	730	660	708	666	---	---
9	900	830	790	700	850	800	740	690	719	693	---	---
10	---	---	810	790	890	820	780	720	725	702	---	---
11	780	720	870	810	900	830	760	710	731	704	---	---
12	820	770	890	860	900	500	760	720	864	719	---	---
13	820	760	870	850	520	460	800	740	1040	710	---	---
14	---	---	880	840	790	520	810	740	732	671	---	---
15	940	860	880	750	780	670	780	730	711	680	---	---
16	860	770	760	610	780	700	790	740	710	687	---	---
17	850	700	810	650	720	630	780	750	701	600	---	---
18	800	720	770	720	690	630	830	740	674	531	---	---
19	760	730	790	740	730	660	830	760	531	435	---	---
20	800	760	740	650	740	630	830	750	461	377	---	---
21	820	740	690	610	780	720	860	810	404	363	---	---
22	750	720	760	660	790	550	880	820	390	333	---	---
23	770	740	770	700	600	460	900	840	353	300	---	---
24	830	770	800	720	640	580	890	840	468	306	---	---
25	860	830	790	710	630	600	880	810	---	---	---	---
26	870	840	800	650	670	610	890	830	---	---	---	---
27	---	---	820	760	720	650	880	860	---	---	---	---
28	---	---	830	750	750	710	920	870	---	---	---	---
29	---	---	840	750	790	700	930	920	---	---	---	---
30	---	---	840	770	810	760	1070	920	---	---	---	---
31	---	---	---	---	840	780	1260	1070	---	---	---	---
MONTH	---	---	890	350	900	460	1260	420	1270	300	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	905	885	---	---	662	544	752	737	794	771
2	---	---	912	887	---	---	566	511	753	557	819	785
3	---	---	920	831	---	---	653	566	749	731	851	804
4	---	---	887	833	---	---	686	653	780	698	852	699
5	---	---	926	887	---	---	683	655	699	626	752	702
6	777	757	929	680	---	---	710	664	698	599	792	752
7	782	765	680	546	---	---	751	698	759	696	777	501
8	798	770	546	423	---	---	788	751	785	746	692	600
9	812	771	594	485	---	---	824	779	777	750	797	692
10	794	783	600	578	---	---	821	784	782	764	842	796
11	789	776	578	537	---	---	808	607	798	768	858	840
12	788	773	569	542	---	---	659	596	836	---	864	845
13	816	783	581	567	---	---	770	623	851	827	844	809
14	843	803	605	578	---	---	697	640	891	77[illegible]	822	759
15	822	798	626	602	---	---	641	613	776	749	893	725
16	846	822	644	617	---	---	626	571	---	---	---	---
17	846	837	675	629	---	---	646	622	795	777	900	873
18	843	821	687	662	---	---	689	646	855	795	872	835
19	836	821	701	671	---	---	704	676	881	845	919	865
20	866	833	702	684	---	---	717	681	890	852	---	---
21	876	861	693	677	793	776	740	702	860	732	667	612
22	872	854	707	693	818	788	782	785	788	765	747	619
23	876	860	716	701	859	812	798	782	824	788	817	746
24	876	863	732	704	889	857	819	309	822	804	862	817
25	876	842	740	660	913	877	438	270	846	792	888	852
26	864	834	660	592	887	353	560	432	819	471	906	829
27	885	860	687	658	524	382	642	548	546	420	829	660
28	893	876	---	---	601	524	704	642	561	474	724	676
29	876	855	---	---	607	515	732	672	675	564	807	724
30	897	872	---	---	607	575	684	662	794	659	864	806
31	---	---	---	---	---	---	737	684	794	707	---	---
MONTH	897	757	929	423	---	---	824	270	891	420	919	501

03229600 SCIOTO RIVER BELOW SHADEVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	7.2	7.1
2	---	---	---	---	---	---	---	---	7.1	7.0	7.1	7.1
3	---	---	---	---	---	---	---	---	7.1	7.0	7.2	7.1
4	---	---	---	---	---	---	---	---	7.1	6.9	7.2	7.2
5	---	---	---	---	---	---	---	---	7.2	7.1	7.2	7.1
6	---	---	---	---	---	---	---	---	7.5	7.2	7.2	7.1
7	---	---	---	---	---	---	---	---	7.4	7.3	7.2	7.2
8	---	---	---	---	---	---	---	---	7.4	7.3	7.3	7.2
9	---	---	---	---	---	---	---	---	7.3	7.3	7.3	7.2
10	---	---	---	---	---	---	---	---	7.3	7.1	7.2	7.2
11	---	---	---	---	---	---	---	---	7.1	7.0	7.3	7.2
12	---	---	---	---	---	---	---	---	7.0	6.9	7.2	7.2
13	---	---	---	---	---	---	---	---	7.2	7.0	7.3	7.2
14	---	---	---	---	---	---	---	---	7.1	7.0	7.3	7.2
15	---	---	---	---	---	---	---	---	7.0	7.0	7.3	7.2
16	---	---	---	---	---	---	---	---	7.0	7.0	7.4	7.2
17	---	---	---	---	---	---	---	---	7.0	6.9	7.4	7.3
18	---	---	---	---	---	---	---	---	7.2	7.0	7.4	7.3
19	---	---	---	---	---	---	---	---	7.2	7.1	7.3	7.2
20	---	---	---	---	---	---	---	---	7.4	7.2	7.3	7.3
21	---	---	---	---	---	---	---	---	7.2	7.2	7.4	7.3
22	---	---	---	---	---	---	---	---	7.2	7.1	7.4	7.3
23	---	---	---	---	---	---	---	---	7.3	7.2	7.4	7.3
24	---	---	---	---	---	---	---	---	7.2	7.2	7.4	7.3
25	---	---	---	---	---	---	---	---	7.2	7.2	7.5	7.4
26	---	---	---	---	---	---	---	---	7.2	7.1	7.8	7.4
27	---	---	---	---	---	---	---	---	7.2	7.2	7.5	7.3
28	---	---	---	---	---	---	---	---	7.2	7.1	7.4	7.3
29	---	---	---	---	---	---	---	---	---	---	7.4	7.3
30	---	---	---	---	---	---	---	---	---	---	7.5	7.3
31	---	---	---	---	---	---	---	---	---	---	7.5	7.3
MONTH	---	---	---	---	---	---	---	---	7.5	6.9	7.8	7.1

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.4	7.6	7.3	7.9	7.6	7.4	7.3	7.3	7.0	6.9	6.8
2	7.6	7.4	7.6	7.3	7.7	7.5	7.4	7.3	7.4	7.1	7.5	6.7
3	7.7	7.5	7.6	7.2	7.5	7.4	7.5	7.3	7.2	7.0	6.9	6.8
4	7.6	7.4	7.6	7.4	7.5	7.4	7.5	7.4	7.3	7.0	7.1	6.7
5	7.7	7.4	7.5	7.3	7.7	7.4	7.5	7.4	7.6	7.1	7.0	6.8
6	7.7	7.5	7.5	7.1	7.8	7.6	7.6	7.4	7.3	7.0	7.0	6.8
7	7.7	7.5	7.5	7.2	7.8	7.6	7.8	7.4	7.3	7.0	6.9	6.6
8	8.1	7.5	7.5	7.4	7.7	7.5	7.9	7.5	7.2	7.0	7.0	6.8
9	7.8	7.6	7.8	7.5	7.7	7.5	7.7	7.4	7.1	6.9	7.0	6.8
10	7.9	7.6	7.7	7.4	7.7	7.5	7.5	7.4	7.2	6.9	6.9	6.8
11	7.9	7.6	7.4	7.3	7.8	7.5	7.5	7.4	7.1	7.0	6.9	6.8
12	7.9	7.6	7.3	7.2	7.6	7.5	7.8	7.5	7.2	7.0	7.0	6.9
13	7.7	7.5	7.5	7.2	7.5	7.4	7.5	7.4	7.3	7.0	7.0	6.9
14	7.6	7.4	7.5	7.4	7.5	7.4	7.7	7.4	7.3	7.0	7.5	6.9
15	7.6	7.5	7.5	7.4	7.8	7.5	8.2	7.6	7.2	6.9	7.5	7.3
16	7.5	7.4	7.5	7.4	8.0	7.6	8.2	7.5	7.3	7.0	7.3	7.2
17	7.4	7.3	7.5	7.3	8.0	7.6	7.9	7.5	7.2	7.0	7.3	7.2
18	7.4	7.3	7.5	7.3	7.8	7.5	7.9	7.4	7.2	7.0	7.4	7.2
19	8.0	7.3	7.6	7.4	7.7	7.5	7.8	7.5	7.2	7.0	7.3	7.2
20	7.9	7.4	7.5	7.4	7.7	7.5	7.6	7.0	7.0	6.8	7.4	7.2
21	7.6	7.3	7.7	7.4	7.6	7.5	7.1	7.0	7.1	6.8	7.7	7.3
22	7.9	7.3	7.6	7.4	7.6	7.5	7.2	7.0	7.0	6.9	7.4	7.3
23	8.0	7.3	7.7	7.5	7.5	7.5	7.1	6.9	7.1	6.8	7.3	7.2
24	8.1	7.4	7.8	7.5	7.5	7.4	7.2	6.8	7.1	6.9	7.3	7.2
25	8.2	7.5	7.8	7.6	7.5	7.4	7.0	6.9	7.0	6.8	7.3	7.2
26	8.1	7.5	7.8	7.5	7.6	7.3	7.1	6.9	7.1	6.7	7.3	7.2
27	7.8	7.4	7.8	7.6	7.4	7.4	7.1	7.0	6.9	6.7	7.4	7.2
28	7.6	7.3	8.0	7.6	7.5	7.4	7.2	7.0	6.9	6.8	7.3	7.2
29	7.5	7.3	8.0	7.8	7.5	7.4	7.2	6.9	7.0	6.8	7.3	7.2
30	7.6	7.3	7.9	7.7	7.5	7.4	7.1	7.0	7.0	6.9	7.3	7.2
31	---	---	7.9	7.6	---	---	7.2	7.0	7.0	6.9	---	---
MONTH	8.2	7.3	8.0	7.1	8.0	7.3	8.2	6.8	7.6	6.7	7.7	6.6

03229600 SCIOTO RIVER BELOW SHADEVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	5.8	5.1	10.8	10.1	---	---	12.0	11.4
2	---	---	6.6	2.0	6.0	5.1	10.8	10.1	11.0	10.1	11.6	11.1
3	---	---	7.0	5.8	6.7	5.0	10.8	10.0	10.1	9.4	11.5	11.3
4	---	---	6.0	5.5	5.5	4.4	11.0	9.5	10.2	7.9	11.8	11.5
5	5.0	4.4	6.0	5.4	5.4	4.9	11.8	10.6	10.9	10.2	11.8	11.0
6	5.0	3.8	6.2	5.7	6.0	5.3	13.0	11.5	11.7	10.9	11.3	10.5
7	4.9	3.8	6.5	5.7	6.3	5.6	12.0	11.5	11.9	11.7	12.1	11.3
8	6.3	3.2	7.0	5.7	6.7	5.7	11.8	11.1	11.9	11.6	12.5	12.1
9	5.1	2.2	6.5	6.1	6.5	5.6	11.5	10.9	11.7	11.3	12.5	11.7
10	---	---	6.1	5.7	10.5	5.4	11.5	10.5	11.3	10.8	11.8	11.3
11	6.1	4.7	6.2	5.4	9.4	5.3	11.3	10.5	10.8	10.4	11.8	11.3
12	4.7	3.0	5.6	5.0	9.7	4.8	11.3	10.4	10.4	9.6	11.6	11.1
13	2.9	2.1	5.5	5.0	10.2	9.5	11.2	10.3	11.0	9.8	11.3	11.0
14	3.6	2.4	5.1	4.5	11.0	8.2	11.3	10.3	11.0	10.7	11.7	11.3
15	3.1	2.4	5.6	4.3	11.7	10.9	---	---	11.0	7.4	11.5	10.7
16	5.0	2.6	5.5	5.3	11.6	10.7	---	---	11.1	10.7	11.5	10.0
17	12.2	3.2	5.7	5.3	10.9	10.5	---	---	11.2	10.3	12.1	11.4
18	12.1	9.2	5.7	5.2	11.1	10.4	---	---	11.6	11.2	12.0	11.4
19	11.6	9.6	5.7	5.1	11.1	9.8	---	---	11.8	11.6	11.4	10.8
20	9.8	8.4	5.7	4.9	12.0	9.9	---	---	11.8	11.4	11.3	10.8
21	8.7	6.1	5.4	4.6	11.3	10.1	---	---	12.2	11.7	12.0	11.3
22	8.1	4.6	5.9	5.0	11.0	9.9	---	---	12.2	11.2	11.6	11.3
23	4.6	3.2	5.6	5.0	11.2	10.8	---	---	11.4	10.9	12.0	11.3
24	3.9	3.1	7.5	5.5	11.7	10.9	---	---	12.0	11.3	12.2	11.7
25	5.4	1.5	7.5	5.5	12.0	11.6	---	---	12.6	12.0	11.9	11.2
26	4.8	1.9	6.1	5.6	12.3	12.0	---	---	12.2	11.6	11.4	10.4
27	---	---	7.0	5.9	12.3	11.7	---	---	11.7	11.1	10.8	10.3
28	---	---	6.7	5.5	12.1	11.0	---	---	11.9	11.2	10.6	10.0
29	---	---	6.0	5.5	11.9	10.5	---	---	---	---	10.4	9.5
30	---	---	5.7	5.2	11.8	10.6	---	---	---	---	10.5	9.2
31	---	---	---	---	10.7	9.9	---	---	---	---	10.9	9.1
MONTH	---	---	7.5	2.0	12.3	4.4	---	---	12.6	7.4	12.5	9.1

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.4	8.2	4.2	8.6	4.1	3.1	1.6	8.5	4.8	6.1	1.8
2	11.0	9.1	8.3	4.8	7.2	3.5	3.2	2.3	10.3	5.2	8.9	1.6
3	12.1	9.9	8.0	4.5	5.6	3.0	3.6	1.8	7.7	5.6	4.1	1.6
4	12.3	9.8	8.3	4.8	4.1	2.0	3.7	2.1	7.8	5.0	6.2	1.5
5	12.8	10.2	7.0	4.3	3.8	1.3	3.7	1.8	9.9	5.9	6.5	2.9
6	12.9	10.3	6.3	2.4	4.9	2.2	5.4	1.9	10.1	2.6	5.3	2.2
7	12.9	10.1	7.6	5.7	5.6	2.1	7.6	1.9	10.0	4.3	4.6	0.6
8	13.7	4.7	8.1	7.6	4.6	1.8	8.4	2.8	8.5	4.1	5.1	2.2
9	12.8	10.1	8.6	8.1	4.1	1.4	7.4	2.3	9.3	2.4	4.4	1.5
10	13.8	10.1	8.7	6.1	3.5	1.5	3.6	1.5	8.1	3.0	2.9	1.1
11	14.2	10.4	8.3	7.6	4.9	0.9	2.3	1.1	7.0	2.7	---	---
12	14.0	9.7	7.8	7.2	3.0	1.0	4.8	2.0	7.1	2.8	---	---
13	12.1	9.0	8.0	6.4	3.9	1.2	2.9	1.7	7.9	2.8	---	---
14	11.6	8.1	7.5	6.6	4.8	1.3	2.4	0.8	7.8	1.8	---	---
15	13.2	9.2	6.7	6.2	5.3	2.3	4.4	1.5	5.9	1.6	4.8	1.8
16	13.2	9.3	6.3	5.7	6.1	2.6	6.7	1.5	8.2	1.4	3.0	1.1
17	11.1	6.1	6.1	5.0	6.9	3.5	7.0	1.9	7.9	2.4	3.5	1.2
18	10.8	7.5	6.7	4.3	6.3	2.3	7.4	2.0	7.5	2.7	4.5	1.7
19	10.7	7.0	6.5	4.4	5.3	2.0	6.4	2.3	8.8	2.6	4.0	2.0
20	10.3	4.4	6.4	4.2	5.5	2.0	5.8	3.3	6.5	0.5	3.2	1.8
21	7.7	3.8	7.1	4.3	5.0	2.1	5.8	1.9	7.4	0.4	4.6	3.2
22	10.5	4.1	6.6	4.5	5.3	2.2	6.7	2.1	7.1	2.1	4.4	3.1
23	11.1	5.0	6.5	4.7	5.5	2.2	2.6	1.9	6.2	2.3	4.6	2.7
24	10.6	4.3	5.2	3.0	5.4	2.0	4.6	0.7	8.0	2.6	4.3	2.8
25	10.4	5.6	5.1	2.9	4.9	1.8	4.5	3.7	5.8	2.5	4.3	2.8
26	11.2	5.0	5.7	3.6	4.6	0.0	5.1	3.5	5.5	1.1	3.8	1.6
27	10.1	5.2	6.8	4.5	4.7	3.9	5.3	3.4	4.1	0.6	4.4	1.8
28	9.1	4.0	7.1	5.0	4.0	2.8	6.3	3.5	4.0	3.1	5.2	2.6
29	6.9	4.2	7.1	5.1	3.4	2.9	7.5	2.8	4.7	3.2	5.1	2.4
30	8.2	3.9	6.8	4.6	2.9	2.3	6.2	4.1	5.3	3.3	4.4	2.1
31	---	---	7.5	3.6	---	---	7.5	4.3	5.7	2.7	---	---
MONTH	14.2	3.8	8.7	2.4	8.6	0.0	8.4	0.7	10.3	0.4	8.9	0.6
YEAR	14.2	0.0										

03229600 SCIOTO RIVER BELOW SHADEVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	4.0	0.5	3.5	1.0	5.0	4.0
2	---	---	15.0	---	---	---	4.0	1.0	3.5	2.0	5.5	5.0
3	---	---	---	---	---	---	5.0	2.0	4.5	3.5	5.0	2.5
4	---	---	9.0	---	---	---	5.5	1.5	5.5	2.5	4.0	2.5
5	21.5	16.5	9.5	7.0	---	---	---	---	2.5	1.5	4.5	2.5
6	20.5	16.5	9.5	5.0	---	---	---	---	2.0	1.5	5.0	4.0
7	20.0	15.5	9.5	7.0	---	---	---	---	2.0	1.5	4.0	2.0
8	21.0	15.5	10.0	7.0	---	---	---	---	2.0	1.5	2.5	1.5
9	22.0	19.0	10.0	9.0	---	---	---	---	2.0	1.0	3.5	2.5
10	---	---	13.0	12.0	---	---	---	---	2.5	1.5	3.5	3.0
11	19.5	16.5	13.5	11.5	---	---	---	---	4.0	2.5	4.0	3.0
12	20.0	17.0	13.5	11.5	---	---	---	---	4.5	4.0	5.5	3.5
13	21.5	18.0	13.5	12.0	---	---	---	---	4.0	1.5	5.5	5.0
14	21.5	19.0	13.0	10.5	---	---	---	---	2.5	1.5	6.0	4.0
15	21.5	18.0	11.0	7.0	---	---	---	---	3.5	2.5	8.0	6.0
16	18.5	14.5	7.0	5.0	---	---	---	---	4.0	3.0	8.0	5.0
17	16.0	14.0	9.0	4.5	---	---	---	---	4.5	2.5	5.0	4.0
18	15.5	14.5	8.0	---	---	---	---	---	3.0	2.0	5.5	4.0
19	15.5	13.5	---	---	---	---	---	---	2.5	2.5	6.0	5.0
20	15.5	14.0	---	---	---	---	---	---	3.0	2.5	5.0	4.0
21	16.5	14.5	---	---	---	---	---	---	3.0	2.5	5.0	3.5
22	16.5	14.0	---	---	---	---	---	---	4.0	3.0	5.5	5.0
23	16.0	14.5	---	---	---	---	---	---	3.5	3.0	5.0	4.0
24	16.0	13.5	---	---	---	---	---	---	3.0	2.5	5.0	3.5
25	18.0	14.5	---	---	---	---	---	---	2.5	1.5	6.0	4.0
26	16.5	14.5	---	---	---	---	---	---	4.0	2.0	7.0	4.5
27	---	---	---	---	---	---	---	---	5.5	4.0	7.5	5.5
28	---	---	---	---	4.5	1.5	---	---	5.0	4.0	9.0	7.0
29	---	---	---	---	4.0	1.5	3.0	2.0	---	---	8.5	8.0
30	---	---	---	---	4.0	1.5	5.0	3.0	---	---	9.5	7.0
31	---	---	---	---	4.5	1.5	4.5	3.0	---	---	10.5	7.5
MONTH	---	---	---	---	---	---	---	---	5.5	1.0	10.5	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.5	15.0	12.0	22.5	20.0	26.5	25.5	24.0	21.5	25.0	22.0
2	10.0	9.0	15.0	13.5	23.0	21.0	26.0	24.5	24.5	22.5	24.5	23.0
3	11.0	8.0	14.5	13.0	24.0	21.5	26.0	23.0	24.0	23.0	23.5	23.0
4	11.0	8.5	15.0	12.0	25.5	22.5	27.0	23.5	23.0	22.0	24.5	22.5
5	10.0	8.5	14.5	13.0	27.0	24.0	26.5	24.5	23.5	21.0	25.0	22.5
6	10.0	8.0	15.5	14.0	27.0	24.5	27.0	24.0	24.5	21.0	25.5	23.5
7	11.0	8.0	14.5	13.5	26.0	24.5	28.0	24.0	25.0	22.0	25.0	23.0
8	17.5	9.5	14.0	13.0	26.5	24.0	28.5	24.5	25.0	22.5	25.5	23.0
9	14.0	11.0	15.0	13.5	25.5	23.0	28.5	25.0	26.0	22.5	26.0	23.0
10	14.0	11.0	15.5	13.5	24.5	21.5	26.5	24.5	26.0	24.0	26.0	24.0
11	15.0	11.0	15.0	14.5	25.5	23.0	25.0	24.0	26.0	24.0	25.0	23.0
12	16.5	12.5	14.5	14.5	25.0	24.0	26.5	23.5	25.5	22.5	23.0	22.0
13	17.0	14.5	15.0	13.5	26.0	23.5	26.0	23.5	25.5	22.0	22.5	20.5
14	16.0	13.5	16.5	14.0	25.5	23.5	27.5	25.0	26.0	22.5	22.0	19.5
15	15.5	12.5	18.0	15.5	26.0	24.0	27.5	24.5	25.5	24.0	23.0	20.0
16	17.0	13.0	20.0	16.5	27.0	24.5	26.5	24.0	26.0	23.0	22.0	21.0
17	17.5	15.0	21.0	17.5	26.5	24.0	26.0	24.0	25.5	22.5	21.0	20.5
18	18.0	15.0	22.5	19.5	27.0	24.0	25.0	23.5	25.0	22.5	21.5	20.0
19	17.5	15.0	23.0	20.5	26.5	25.0	25.0	23.5	25.5	23.0	21.0	20.5
20	18.5	15.0	23.5	21.0	28.0	24.5	24.5	22.0	25.0	23.5	20.5	20.0
21	17.0	14.5	23.0	20.5	27.0	25.0	25.0	21.5	25.5	23.5	19.5	18.0
22	15.5	13.5	22.0	19.5	26.0	23.0	25.5	22.0	25.0	23.5	20.0	17.5
23	16.0	13.0	21.5	18.5	26.0	22.5	27.5	23.0	25.5	23.0	20.0	18.5
24	16.0	13.0	21.5	19.5	27.0	23.5	25.0	22.0	24.5	21.5	20.0	18.0
25	16.5	12.5	20.5	18.5	27.0	24.0	23.0	21.0	23.0	21.5	19.0	17.5
26	16.5	13.5	18.5	17.0	24.0	22.0	24.0	22.5	23.0	21.0	20.0	18.0
27	14.5	13.0	17.5	16.5	25.5	22.5	24.5	21.5	22.0	21.5	20.5	18.5
28	17.0	13.5	18.5	16.0	27.0	24.5	25.0	21.5	22.5	20.5	22.5	19.5
29	15.0	13.5	19.5	16.5	27.0	24.5	25.5	23.0	23.5	20.5	24.0	21.0
30	14.5	12.5	20.5	17.0	27.5	25.5	24.0	22.5	24.0	21.0	25.0	22.5
31	---	---	21.5	18.0	---	---	24.0	21.5	24.5	22.0	---	---
MONTH	18.5	8.0	23.5	12.0	28.0	20.0	28.5	21.0	26.0	20.5	26.0	17.5

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO

LOCATION.--Lat 39°20'29", long 82°58'16", Ross County, at gaging station on right bank at north end of Chillicothe, 1,400 ft downstream from Bridge Street Bridge on U.S. Highway 23, 7.4 miles upstream from Paint Creek, and 15.4 miles downstream from Deer Creek.

DRAINAGE AREA.--3,849 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1950 to September 1951, May 1965 to September 1971.
Water temperatures: October 1950 to September 1951, October 1953 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 850 micromhos Oct. 13; minimum, 250 micromhos June 26.
Water temperatures: Maximum, 28.0°C Aug. 9, 10; minimum, freezing point Dec. 28, Jan. 20.

Period of record:
Specific conductance (1950-51, 1965-66, 1968-71): Maximum, 1,040 micromhos Feb. 9, 1966; minimum, 220 micromhos Aug. 10, 1969.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.							
02...	0955	626	244	0	83	29	.9
03...	1020	--	--	--	--	--	--
26...	1120	554	260	0	110	36	1.5
NOV.							
02...	1145	638	262	0	120	41	1.6
18...	1100	1720	236	0	78	31	.7
DEC.							
03...	1115	975	269	0	100	45	.9
22...	1450	4830	218	0	91	27	.5
JAN.							
05...	1030	8070	186	0	92	28	.5
25...	1000	1100	286	0	130	44	.7
FEB.							
10...	1250	2800	190	10	120	42	.5
MAR.							
09...	1245	9480	170	0	75	27	.3
31...	1210	2470	252	0	95	30	.5
APR.							
06...	1040	1660	260	0	110	35	.8
28...	1440	945	280	0	120	41	.8
MAY							
06...	1140	1110	242	0	130	40	.6
14...	1240	4990	208	0	84	28	.3
JUNE							
14...	0835	960	230	18	120	36	.5
14...	1645	--	--	--	--	--	--
28...	1500	7100	164	0	61	20	.4
JULY							
22...	1030	734	228	12	96	37	.5
26...	1055	2470	134	0	57	25	.3
AUG.							
04...	0950	874	222	0	87	34	.5
18...	1130	520	248	0	130	55	.9
SEP.							
10...	1030	930	198	0	70	29	.7
22...	0950	1800	210	0	120	50	.9

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

EXTREMES.--Period of record--Continued
Dissolved oxygen (1965-67): Maximum, 15.0 mg/l on several days during June 1966, June and July 1967; minimum, 0.0 mg/l Apr. 27, Aug. 12, Sept. 22, 1966.
Water temperatures: Maximum, 32.0°C July 14, 1954, Aug. 2, 3, 1955; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since May 1965. Minimum recorded specific conductance value of 180 micromhos occurred May 24, 1968. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. Tabular data omitted for those periods when no data were recorded. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on the maximum specific conductance and the minimum specific conductance of the samples collected each month. Special samples were also collected twice a year to further define the quality of water. Prior to June 1971, sampling site was at center of Bridge Street Bridge on U.S. Highway 23, 1,400 ft upstream from gaging station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
02...	10	408	280	80	644	--	--
03...	--	--	--	--	--	8.0	1.6
26...	11	468	310	96	730	--	--
NOV.							
02...	17	508	320	100	788	--	--
18...	9.6	388	280	86	625	--	--
DEC.							
03...	12	492	320	99	739	--	--
22...	9.7	376	280	100	608	--	--
JAN.							
05...	21	360	250	98	573	--	--
25...	24	522	360	120	801	--	--
FEB.							
10...	24	454	300	130	695	--	--
MAR.							
09...	26	318	240	100	522	--	--
31...	24	444	320	110	670	--	--
APR.							
06...	11	448	340	130	710	--	--
28...	6.5	484	340	110	771	--	--
MAY							
06...	24	440	330	130	786	--	--
14...	34	358	290	120	587	--	--
JUNE							
14...	15	470	340	120	718	--	--
14...	--	--	--	--	--	24	.7
28...	37	304	220	86	467	--	--
JULY							
22...	16	398	300	92	681	--	--
26...	11	218	170	60	404	--	--
AUG.							
04...	9.6	376	260	78	583	--	--
18...	19	526	320	120	813	--	--
SEP.							
10...	10	328	230	68	542	--	--
22...	20	464	290	120	760	--	--

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	620	550	770	750	750	720	---	---	---	---	---	---
2	650	600	780	740	760	740	---	---	---	---	---	---
3	670	650	740	510	740	720	---	---	---	---	---	---
4	700	640	540	440	740	720	---	---	---	---	---	---
5	750	670	510	440	790	740	---	---	---	---	---	---
6	750	710	540	510	780	740	---	---	---	---	---	---
7	770	730	580	540	740	730	---	---	---	---	---	---
8	790	720	600	580	750	740	---	---	---	---	---	---
9	810	710	620	600	760	740	---	---	---	---	530	520
10	810	750	660	620	740	730	---	---	---	---	560	530
11	830	720	680	660	740	720	---	---	---	---	570	560
12	830	750	690	680	740	680	---	---	---	---	600	570
13	850	750	700	690	680	540	720	690	---	---	600	540
14	800	690	730	700	540	410	690	650	---	---	560	540
15	750	670	750	710	590	480	720	670	---	---	550	510
16	760	660	740	680	690	590	740	710	---	---	520	510
17	700	620	680	620	700	670	760	710	---	---	550	520
18	670	590	640	620	670	600	780	730	---	---	540	500
19	720	620	680	620	600	600	780	740	---	---	520	510
20	730	660	710	680	640	600	---	---	---	---	580	520
21	690	670	730	710	660	640	---	---	---	---	590	560
22	710	660	750	730	660	470	---	---	---	---	570	560
23	710	660	750	720	540	450	---	---	---	---	610	570
24	750	670	720	690	510	440	---	---	---	---	620	600
25	760	700	700	690	600	510	---	---	---	---	---	---
26	730	670	690	660	600	580	---	---	---	---	620	600
27	720	670	660	650	600	580	---	---	---	---	630	620
28	740	690	670	650	640	600	---	---	---	---	640	630
29	770	710	690	670	---	---	---	---	---	---	640	630
30	760	740	720	690	---	---	---	---	---	---	650	640
31	760	750	---	---	---	---	---	---	---	---	690	640
MONTH	850	550	780	440	790	410	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	710	690	760	740	690	650	510	480	670	650	580	500
2	720	700	750	720	720	670	550	510	650	630	600	490
3	720	720	720	690	730	710	560	510	630	460	670	530
4	730	720	760	690	740	730	520	510	660	380	700	670
5	740	720	800	750	750	710	540	520	670	650	730	700
6	740	730	790	700	780	720	580	540	680	660	740	560
7	740	720	780	660	790	730	590	560	700	680	770	660
8	740	720	700	520	770	740	600	550	690	660	740	630
9	740	730	600	520	740	690	620	570	660	640	640	560
10	740	720	640	600	710	680	620	440	670	650	560	530
11	740	720	640	590	730	700	600	420	700	670	560	380
12	770	700	590	560	720	700	690	600	730	700	630	560
13	750	700	580	560	710	670	700	670	730	690	670	610
14	750	740	620	580	740	680	670	580	730	700	730	670
15	760	700	630	620	750	680	640	580	730	720	770	730
16	740	710	650	630	750	700	640	590	780	730	790	700
17	750	720	660	640	730	700	600	590	780	760	790	770
18	740	700	680	660	730	710	610	520	810	770	770	760
19	740	720	690	670	740	700	620	560	810	750	760	740
20	760	720	710	690	720	700	630	620	750	730	740	700
21	730	700	720	690	740	690	660	630	730	700	780	690
22	760	690	720	700	740	710	670	660	760	680	760	690
23	760	740	720	710	720	700	680	650	780	750	690	550
24	760	730	720	690	730	690	690	570	800	760	580	550
25	740	700	710	690	740	610	750	520	810	670	570	490
26	740	700	700	650	710	250	520	400	700	500	580	460
27	740	690	680	600	---	---	460	420	760	520	620	580
28	750	700	650	600	460	460	520	450	680	520	680	620
29	740	720	670	620	490	460	560	450	540	480	680	670
30	760	730	640	620	520	480	620	560	520	470	700	650
31	---	---	660	640	---	---	650	610	540	500	---	---
MONTH	770	690	800	520	790	250	750	400	810	380	790	380
YEAR	850	250										

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

PH (UNITS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	8.1	7.6	---	---	8.2	7.8
2	---	---	---	---	---	---	7.8	7.6	---	---	8.2	7.8
3	---	---	---	---	---	---	7.8	7.5	---	---	8.6	7.7
4	---	---	---	---	---	---	7.7	7.6	---	---	8.5	7.9
5	---	---	---	---	---	---	8.0	7.6	---	---	8.5	7.5
6	---	---	---	---	---	---	8.1	7.6	7.6	7.3	8.6	7.8
7	---	---	---	---	---	---	8.2	7.6	7.9	7.3	8.4	7.5
8	---	---	---	---	---	---	8.3	7.7	8.1	7.4	8.4	7.4
9	---	---	---	---	---	---	8.2	7.7	8.1	7.6	7.9	6.7
10	---	---	---	---	---	---	8.0	7.4	8.0	7.6	7.5	7.0
11	---	---	---	---	---	---	7.6	7.5	7.9	7.2	7.5	7.2
12	---	---	---	---	---	---	7.5	7.4	7.6	7.2	7.3	7.2
13	---	---	---	---	---	---	7.4	7.3	7.6	7.3	7.3	7.2
14	---	---	---	---	---	---	7.6	7.2	7.7	7.3	7.5	7.3
15	---	---	---	---	---	---	7.6	7.1	7.9	7.2	7.5	7.3
16	---	---	---	---	---	---	7.5	7.2	7.6	7.2	7.5	7.3
17	---	---	---	---	---	---	7.7	7.4	7.4	7.1	7.5	7.3
18	---	---	---	---	---	---	7.5	7.3	7.5	7.1	7.5	7.4
19	---	---	---	---	---	---	8.0	7.4	7.5	7.2	7.5	7.4
20	---	---	---	---	---	---	8.1	7.6	7.6	7.2	7.5	7.4
21	---	---	---	---	---	---	8.0	7.6	7.8	7.4	7.5	7.4
22	---	---	---	---	---	---	7.6	7.4	7.7	7.4	7.6	7.3
23	---	---	---	---	---	---	7.6	7.3	7.5	7.3	7.5	7.2
24	---	---	---	---	---	---	8.0	7.4	7.6	7.2	7.7	7.4
25	---	---	---	---	---	---	---	---	8.1	7.3	7.7	7.6
26	---	---	---	---	---	---	---	---	8.2	7.6	7.9	7.6
27	---	---	---	---	---	---	---	---	8.0	7.4	7.7	7.6
28	---	---	---	---	7.7	7.5	---	---	8.0	7.3	7.7	7.5
29	---	---	---	---	7.9	7.5	---	---	7.9	7.5	7.6	7.5
30	---	---	---	---	7.8	7.6	---	---	8.2	7.6	7.8	7.5
31	---	---	---	---	---	---	---	---	8.2	7.7	---	---
MONTH	---	---	---	---	---	---	---	---	8.2	7.1	8.6	6.7

~~9~~	~~10.1~~	~~8.1~~	~~---~~	~~---~~	~~6.4~~	~~3.8~~	~~10.1~~	~~6.7~~	~~12.8~~	~~7.8~~	~~1.9~~	~~1.1~~
~~10~~	~~10.9~~	~~8.3~~	~~---~~	~~---~~	~~4.5~~	~~2.6~~	~~7.6~~	~~4.9~~	~~9.3~~	~~5.3~~	~~1.7~~	[illegible]
~~11~~	~~10.7~~	~~8.8~~	~~---~~	~~---~~	~~5.0~~	~~2.4~~	~~6.9~~	~~4.3~~	~~5.7~~	~~4.0~~	[illegible]	~~1.5~~
~~12~~	~~11.2~~	~~8.3~~	~~---~~	~~---~~	~~6.0~~	~~2.6~~	~~5.6~~	~~4.2~~	~~5.2~~	~~3.3~~	[illegible]	~~1.8~~
~~13~~	~~10.2~~	~~8.7~~	[illegible]	~~---~~	~~8.8~~	~~3.3~~	~~4.8~~	~~4.1~~	~~6.4~~	[illegible]	~~2.6~~	~~2.9~~
~~14~~	~~13.7~~	~~9.1~~	~~---~~	~~---~~	~~7.4~~	~~4.0~~	~~6.9~~	~~3.8~~	~~7.1~~	[illegible]	~~3.4~~	~~2.4~~
~~15~~	~~14.9~~	~~9.6~~	~~---~~	~~---~~	~~5.4~~	~~2.7~~	~~6.2~~	~~4.3~~	~~4.9~~	~~2.9~~	~~3.3~~	~~2.9~~
~~16~~	~~15.0~~	~~9.0~~	~~---~~	~~---~~	~~6.1~~	~~2.7~~	~~6.2~~	~~3.9~~	[illegible]	~~2.4~~	~~3.4~~	~~2.8~~
~~17~~	~~11.9~~	~~7.5~~	~~---~~	~~---~~	[illegible]	~~2.6~~	~~7.2~~	[illegible]	~~4.9~~	~~2.6~~	~~3.5~~	~~2.8~~
~~18~~	~~13.7~~	~~8.1~~	~~---~~	~~---~~	[illegible]	~~2.7~~	~~6.4~~	[illegible]	~~4.3~~	~~2.1~~	~~3.8~~	~~2.9~~
~~19~~	~~14.3~~	~~7.9~~	~~---~~	~~---~~	~~6.8~~	~~3.5~~	[illegible]	~~5.5~~	~~4.0~~	~~1.6~~	~~3.0~~	~~2.6~~
~~20~~	~~13.8~~	~~7.3~~	~~---~~	~~---~~	~~8.8~~	[illegible]	[illegible]	~~7.0~~	~~5.5~~	~~1.7~~	~~3.8~~	~~2.8~~
~~21~~	~~10.1~~	~~6.2~~	~~---~~	~~---~~	~~7.0~~	[illegible]	[illegible]	~~6.2~~	~~6.2~~	~~2.5~~	~~3.9~~	~~3.1~~
~~22~~	~~10.9~~	~~5.4~~	~~---~~	~~---~~	~~5.6~~	[illegible]	[illegible]	~~4.7~~	~~4.3~~	~~2.2~~	~~3.7~~	~~3.0~~
~~23~~	~~13.6~~	~~6.7~~	~~---~~	~~---~~	[illegible]	~~3.1~~	~~6.1~~	~~4.1~~	~~3.7~~	~~2.5~~	~~5.2~~	~~3.3~~
~~24~~	~~15.0~~	~~8.3~~	~~---~~	~~---~~	[illegible]	~~2.9~~	~~5.7~~	[illegible]	~~5.0~~	~~2.6~~	~~6.4~~	~~5.2~~
~~25~~	~~15.0~~	~~10.5~~	~~---~~	~~---~~	~~9.5~~	~~4.2~~	~~4.6~~	[illegible]	~~5.2~~	~~2.4~~	~~6.4~~	~~5.5~~
~~26~~	~~15.0~~	~~11.5~~	~~---~~	[illegible]	~~7.0~~	~~---~~	~~4.2~~	~~2.0~~	[illegible]	~~2.3~~	~~6.2~~	~~4.6~~
~~27~~	~~15.0~~	~~12.0~~	[illegible]	~~---~~	~~---~~	~~---~~	~~5.6~~	~~4.4~~	~~2.5~~	~~1.8~~	~~4.6~~	~~3.5~~
~~28~~	~~15.0~~	~~11.5~~	[illegible]	~~---~~	~~4.4~~	~~4.1~~	~~8.0~~	~~4.8~~	~~2.2~~	[illegible]	~~3.6~~	~~3.1~~
~~29~~	~~14.7~~	~~10.3~~	[illegible]	~~---~~	~~4.2~~	~~4.0~~	~~8.2~~	~~5.5~~	~~3.0~~	[illegible]	~~3.7~~	~~2.9~~
~~30~~	~~15.0~~	[illegible]	~~---~~	~~---~~	~~4.0~~	~~3.6~~	~~6.6~~	~~4.9~~	~~3.6~~	~~2.6~~	~~4.0~~	~~2.8~~
~~31~~	~~---~~	[illegible]	~~---~~	~~---~~	~~---~~	~~---~~	~~7.3~~	~~4.6~~	~~3.9~~	~~2.7~~	[illegible]	~~---~~
~~MONTH~~	~~15.0~~	[illegible]	~~---~~	~~---~~	~~---~~	~~---~~	~~11.6~~	~~1.4~~	~~14.3~~	~~1.6~~	~~6.4~~	~~0.7~~

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.9	3.7	---	---	6.6	6.4	---	---	---	---	---	---
2	5.3	4.6	---	---	6.4	6.3	---	---	---	---	---	---
3	5.6	4.2	---	---	6.5	6.4	---	---	---	---	---	---
4	5.8	4.5	---	---	---	---	---	---	---	---	---	---
5	5.9	4.5	---	---	---	---	---	---	---	---	---	---
6	5.6	4.5	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	6.5	4.8	---	---	---	---	---	---	---	---	10.1	10.0
10	5.1	4.8	4.4	4.0	7.8	6.9	---	---	---	---	10.7	10.0
11	5.6	3.3	4.8	3.7	7.1	6.4	---	---	---	---	10.4	9.9
12	---	---	4.9	4.0	6.6	6.2	---	---	---	---	10.1	9.5
13	---	---	4.9	4.7	7.1	6.0	12.1	11.4	---	---	10.0	9.5
14	---	---	4.7	4.5	8.6	7.1	12.5	11.7	---	---	11.0	8.1
15	---	---	5.3	4.5	8.7	7.4	12.8	12.5	---	---	8.7	6.9
16	---	---	6.0	5.3	9.3	8.7	13.0	12.0	---	---	9.2	7.2
17	---	---	9.6	6.0	9.3	9.1	13.2	10.9	---	---	9.2	7.3
18	---	---	8.6	8.5	9.3	8.7	13.4	11.0	---	---	9.0	7.5
19	---	---	8.8	6.6	8.7	8.2	11.2	11.1	---	---	9.4	8.3
20	---	---	7.7	6.9	8.5	8.2	---	---	---	---	9.7	7.5
21	---	---	7.9	7.5	8.5	8.4	---	---	---	---	8.6	7.2
22	---	---	7.7	7.1	9.1	8.5	---	---	---	---	9.2	7.3
23	---	---	8.6	7.1	9.4	8.8	---	---	---	---	10.9	9.2
24	---	---	10.0	8.6	10.1	9.3	---	---	---	---	10.1	9.6
25	---	---	9.9	9.4	11.1	10.1	---	---	---	---	---	---
26	---	---	10.0	8.5	11.6	11.1	---	---	---	---	10.0	9.1
27	---	---	8.5	7.4	11.5	11.2	---	---	---	---	9.1	8.7
28	---	---	7.4	7.2	11.4	10.1	---	---	---	---	9.1	8.3
29	---	---	7.2	6.8	---	---	---	---	---	---	9.2	8.4
30	---	---	6.8	6.6	---	---	---	---	---	---	9.3	9.1
31	---	---	---	---	---	---	---	---	---	---	9.3	8.8
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.1	8.5	15.0	9.3	---	---	4.1	3.6	9.9	5.3	5.6	3.2
2	9.5	8.6	14.6	9.2	---	---	4.3	3.7	7.8	5.1	4.4	2.9
3	9.6	8.7	---	---	---	---	4.5	3.3	6.3	4.5	3.7	2.2
4	9.0	8.6	14.0	11.3	---	---	5.3	4.3	6.2	4.4	3.3	2.0
5	9.8	8.6	---	---	---	---	7.1	4.9	6.5	4.9	2.3	1.6
6	10.0	8.6	---	---	---	---	8.5	5.0	6.5	4.5	2.9	1.3
7	10.5	8.9	---	---	---	---	9.3	5.1	12.2	4.4	1.9	1.3
8	10.6	8.4	---	---	---	---	10.8	5.9	14.3	6.2	1.6	0.7
9	10.1	8.1	---	---	6.4	3.8	10.1	6.7	12.6	7.8	1.9	1.1
10	10.9	8.3	---	---	4.5	2.6	7.6	4.9	9.3	5.3	1.7	1.3
11	10.7	8.8	---	---	5.0	2.4	6.9	4.3	9.7	4.0	4.0	1.5
12	11.2	8.3	---	---	6.0	2.6	5.6	4.2	5.2	3.3	2.3	1.8
13	10.2	8.7	---	---	8.8	3.3	4.8	4.1	6.4	2.6	2.6	2.0
14	13.7	9.1	---	---	7.4	4.0	6.9	3.8	7.1	3.5	3.4	2.4
15	14.9	9.6	---	---	5.4	2.7	6.2	4.3	4.9	[illegible]	3.3	2.9
16	15.0	9.0	---	---	6.1	2.7	6.2	3.9	4.9	2.4	3.4	2.8
17	11.9	7.5	---	---	5.5	2.6	7.2	4.5	[illegible]	2.6	3.5	2.8
18	13.7	8.1	---	---	6.6	2.7	6.4	4.5	4.3	2.1	3.8	2.9
19	14.3	7.9	---	---	6.8	3.5	10.0	5.5	4.0	1.6	3.0	2.6
20	13.8	7.3	---	---	8.0	4.9	11.6	[illegible]	5.5	1.7	3.8	2.8
21	10.1	6.2	---	---	7.0	5.5	[illegible]	6.2	6.2	2.5	3.9	3.1
22	10.9	5.4	---	---	5.6	3.5	6.4	4.7	4.3	2.2	3.7	3.0
23	13.6	6.7	---	---	5.1	3.1	6.1	4.1	3.7	2.5	5.2	3.3
24	15.0	8.3	---	---	7.1	[illegible]	5.7	4.1	5.0	2.6	6.4	5.2
25	15.0	10.5	---	---	9.5	4.2	4.6	1.4	5.2	2.4	6.4	5.5
26	15.0	11.5	---	---	[illegible]	---	4.2	2.0	3.6	2.3	6.2	4.6
27	15.0	12.0	---	---	---	---	5.6	4.4	2.5	1.8	4.6	3.5
28	15.0	11.5	---	---	4.4	4.1	6.0	4.8	2.2	1.9	3.6	3.1
29	14.7	10.3	---	---	4.2	4.0	8.2	5.5	3.0	2.0	3.7	2.9
30	15.0	8.8	---	---	4.0	3.6	6.6	4.9	3.6	2.6	4.0	2.8
31	---	---	---	---	---	---	7.3	4.6	3.9	2.7	---	---
MONTH	15.0	[illegible]	---	---	---	---	11.6	1.4	14.3	1.6	6.4	0.7

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	16.0	16.5	15.0	11.5	9.5	---	---	---	---	---	---
2	18.0	16.0	16.0	14.5	12.0	11.0	---	---	---	---	---	---
3	18.0	16.0	15.0	13.0	11.5	10.0	---	---	---	---	---	---
4	17.0	15.0	13.5	11.0	12.5	9.5	---	---	---	---	---	---
5	16.5	14.5	12.0	11.0	10.0	9.0	---	---	---	---	---	---
6	18.5	15.0	12.5	10.5	9.0	6.0	---	---	---	---	---	---
7	19.0	16.0	13.5	11.5	6.5	5.0	---	---	---	---	---	---
8	19.5	17.0	13.5	11.5	6.0	5.0	---	---	---	---	---	---
9	20.0	18.0	14.0	11.5	7.5	5.5	---	---	---	---	3.5	3.0
10	18.0	17.5	14.0	12.0	8.0	6.5	---	---	---	---	4.0	3.5
11	18.0	17.0	12.5	12.0	9.0	7.0	---	---	---	---	4.5	3.5
12	20.0	18.0	13.0	11.0	9.0	9.0	---	---	---	---	6.0	4.5
13	21.5	19.0	13.0	12.0	9.5	8.5	6.5	5.5	---	---	6.5	5.5
14	21.0	19.0	12.0	11.0	8.5	6.0	6.5	4.5	---	---	8.0	6.0
15	20.5	18.5	11.0	9.0	6.5	5.5	4.5	3.5	---	---	---	8.0
16	18.5	16.0	9.0	7.0	5.5	4.5	3.5	3.0	---	---	---	8.0
17	17.0	14.5	8.0	6.5	5.5	5.5	3.0	1.5	---	---	9.5	6.0
18	16.0	13.5	8.0	6.5	6.0	5.5	2.0	1.0	---	---	11.0	5.5
19	15.5	13.5	8.5	7.0	6.5	6.0	3.5	1.0	---	---	13.5	7.5
20	15.0	13.5	9.5	8.5	7.5	6.5	1.0	0.0	---	---	10.0	6.5
21	15.0	14.0	9.0	8.5	6.5	6.0	---	---	---	---	---	5.5
22	16.5	14.5	8.5	8.0	6.5	5.5	---	---	---	---	---	9.5
23	16.5	14.5	7.5	4.5	7.0	6.0	---	---	---	---	9.5	2.5
24	16.5	15.0	4.5	3.5	6.5	4.5	---	---	---	---	5.5	2.0
25	18.5	16.0	3.5	2.0	4.5	3.0	---	---	---	---	---	---
26	18.0	16.0	4.0	2.5	3.0	2.0	---	---	---	---	7.0	8.5
27	18.5	16.0	6.5	4.0	2.0	1.5	---	---	---	---	8.0	6.5
28	18.0	16.0	8.0	6.5	2.0	0.0	---	---	---	---	10.0	8.0
29	16.5	15.5	9.5	8.0	---	---	---	---	---	---	9.5	9.0
30	16.5	15.0	9.5	9.0	---	---	---	---	---	---	10.0	8.0
31	16.5	15.0	---	---	---	---	---	---	---	---	11.0	8.5
MONTH	21.5	13.5	16.5	2.0	12.5	0.0	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.0	16.0	13.5	22.5	20.0	24.5	23.5	26.0	22.0	24.0	23.0
2	12.0	10.5	16.0	14.5	23.5	20.5	24.5	23.0	24.5	22.5	24.0	23.0
3	12.0	10.0	15.0	14.0	23.5	22.0	24.0	23.0	23.5	22.5	23.0	22.0
4	13.0	10.5	16.0	13.0	25.0	22.5	25.0	22.0	22.5	22.0	24.0	22.0
5	13.0	11.0	15.5	13.5	25.5	23.5	25.0	23.5	23.0	21.5	25.0	23.0
6	11.5	10.5	16.5	13.5	27.0	24.5	26.0	23.5	24.0	22.5	25.5	23.5
7	13.0	9.5	17.5	15.5	27.0	24.5	26.5	23.5	27.0	21.5	25.5	23.5
8	14.5	11.0	17.0	14.0	27.0	24.5	27.5	24.0	27.5	23.0	25.5	24.0
9	15.5	12.0	15.0	14.0	25.5	23.5	26.5	23.5	28.0	24.0	25.5	24.0
10	15.0	13.0	15.5	14.5	24.0	22.0	25.0	22.5	28.0	24.0	25.5	24.0
11	16.5	13.0	16.0	15.0	24.5	22.0	24.5	23.0	26.0	24.0	25.5	23.0
12	18.0	14.0	15.5	14.5	24.5	23.5	25.0	22.5	26.0	23.0	23.5	23.0
13	18.5	15.0	15.0	14.0	25.5	23.0	26.0	23.0	26.0	23.5	23.0	21.0
14	18.0	14.0	17.5	13.5	25.5	23.5	25.5	24.0	26.0	23.0	22.5	19.5
15	18.0	14.0	18.5	15.5	25.0	24.0	27.0	24.0	26.0	23.5	23.0	21.0
16	18.5	15.0	20.5	17.5	25.5	23.0	27.0	25.0	25.5	23.5	22.0	21.0
17	18.5	15.5	21.5	18.5	26.0	23.5	27.0	25.0	26.0	23.0	21.0	20.5
18	19.0	16.0	23.0	19.5	26.0	24.0	26.0	24.5	26.0	23.0	21.0	20.0
19	19.5	16.0	24.0	21.0	26.0	24.5	26.0	23.5	26.0	23.5	21.0	20.5
20	19.5	16.5	24.5	21.5	27.0	24.0	26.5	23.0	26.0	24.0	21.0	19.5
21	19.0	15.0	24.5	21.5	26.0	25.0	24.5	22.5	26.0	24.0	19.5	18.5
22	17.0	14.0	23.5	21.0	26.5	24.5	26.0	22.0	25.5	24.0	20.5	18.5
23	16.5	14.0	23.0	20.0	26.0	24.0	25.5	22.5	25.5	23.5	20.5	19.0
24	16.5	13.5	23.0	20.5	26.5	24.0	25.0	23.0	25.0	22.0	20.0	18.5
25	17.0	14.0	22.0	19.5	27.0	25.0	25.5	23.0	24.5	22.0	19.5	18.0
26	17.0	14.5	21.0	19.0	25.5	20.5	24.0	22.5	23.0	22.0	20.5	19.0
27	16.0	14.5	20.5	18.5	---	---	25.0	22.0	23.5	22.0	22.0	20.0
28	17.0	14.0	19.5	16.5	23.5	23.0	25.0	22.5	23.0	21.5	23.0	21.0
29	15.5	14.0	19.0	17.0	23.5	22.5	25.5	23.0	23.5	21.5	24.5	22.0
30	16.0	14.0	20.5	16.5	24.0	23.0	24.5	22.5	24.0	22.0	24.0	23.0
31	---	---	21.5	18.0	---	---	24.0	22.5	24.0	22.0	---	---
MONTH	19.5	9.5	24.5	13.0	27.0	20.0	27.5	22.0	28.0	21.5	25.5	18.0
YEAR	28.0	0.0										

03234500 SCIOTO RIVER AT HIGBY, OHIO

LOCATION.--Lat 39°12'44", long 82°51'50", in sec. 6, T.7 N., R.20 W., Ross County, at gaging station on left bank at downstream side of highway bridge, 0.8 mile downstream from Walnut Creek, 1.2 miles north of Higby, 3 miles west northwest of Richmondale, and 5.0 miles upstream from Salt Creek.

DRAINAGE AREA.--5,131 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1967 to September 1971.
Water temperatures: October 1953 to September 1971.
Sediment records: October 1953 to September 1971.

EXTREMES.--1970-71:
Sediment concentrations: Maximum daily, 2,260 mg/l June 26; minimum daily, 9 mg/l Jan. 29.
Sediment discharges: Maximum daily, 147,000 tons Feb. 22; minimum daily, 27 tons Jan. 29.

Period of record:
Water temperatures (1953-67): Maximum, 34.0°C June 29, 1966; minimum, freezing point on many days during winter periods.
Sediment concentrations: Maximum daily, 2,260 mg/l June 26, 1971; minimum daily, 1 mg/l on several days during 1955-56.
Sediment discharges: Maximum daily, 550,000 tons Jan. 23, 1959; minimum daily, 0.82 ton Sept. 8, 1955.

REMARKS.--Continuous water-quality recorder operated since March 1967. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. Flow affected by ice Jan. 8-13, Jan. 18 to Feb. 3, Feb. 9-12. Flow slightly regulated by 5 reservoirs 50 to 105 miles upstream from station, and since 1952 by Rocky Fork Lake 51 miles upstream.

REVISIONS.--Revised figures for mean discharge for water year 1966 superseding those previously published are given herewith:

Jan. 2	15,200	Jan. 6	15,900
3	26,000	7	22,700
4	20,800	8	19,500

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)
OCT.												
21...	1500	868	237	0	120	52	1.2	12	492	300	100	778
22...	1245	1020	226	12	120	49	1.1	11	480	310	100	754
NOV.												
02...	1330	997	274	0	120	48	1.2	12	508	310	85	818
17...	1340	2650	230	0	92	34	1.1	11	410	280	91	665
DEC.												
02...	1405	2650	268	0	100	39	1.1	12	476	310	90	725
22...	1325	13300	204	0	100	24	.5	5.2	360	250	83	566
JAN.												
05...	1200	11600	190	7	85	24	.5	14	354	260	92	567
20...	1310	1250	294	0	120	44	.7	14	508	350	110	805
FEB.												
10...	1345	3830	206	0	100	37	.4	14	414	280	110	643
24...	--	33000	114	0	37	16	.3	15	208	140	46	328
MAR.												
12...	1100	11500	201	0	72	24	.4	21	328	250	86	536
29...	1300	3650	254	0	110	30	.5	23	426	310	100	683
APR.												
01...	1345	2950	230	14	98	33	.6	13	446	330	120	697
28...	0945	1310	272	0	120	42	.6	8.7	462	340	120	782
MAY												
14...	1130	6450	194	0	80	27	.3	32	372	270	110	588
JUNE												
22...	1010	1390	256	0	100	46	.5	12	440	310	100	720
30...	1100	5990	176	4	62	20	.4	21	312	240	90	511
JULY												
22...	1140	1070	260	0	89	46	.4	9.4	406	310	96	712
28...	1150	1510	196	0	81	33	.3	8.0	298	220	60	540
AUG.												
04...	1140	3270	168	0	69	30	.3	4.9	286	200	62	486
24...	1250	696	246	10	120	67	.6	7.4	506	320	100	821
SEP.												
10...	1405	1530	208	0	74	36	.5	11	352	240	70	587
22...	1045	2230	246	0	110	48	.7	11	450	300	98	742

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.								
03...	7.0	10	0	10	0	0	.5	100
JUNE								
14...	16	--	--	--	--	--	.5	--

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	630	610	---	---	---	---	---	---	880	860	---	---
2	---	---	---	---	720	700	---	---	900	880	---	---
3	---	---	---	---	710	690	---	---	910	900	---	---
4	---	---	---	---	700	680	---	---	900	760	---	---
5	---	---	---	---	720	700	---	---	790	780	---	---
6	---	---	---	---	750	720	---	---	---	---	---	---
7	---	---	---	---	740	700	---	---	---	---	---	---
8	---	---	---	---	740	680	---	---	---	---	---	---
9	---	---	---	---	720	700	---	---	---	---	---	---
10	---	---	---	---	730	720	---	---	---	---	---	---
11	---	---	---	---	750	720	---	---	---	---	---	---
12	---	---	---	---	750	670	---	---	---	---	---	---
13	---	---	---	---	740	560	---	---	---	---	---	---
14	---	---	---	---	610	520	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	560	500	---	---	---	---	---	---
23	---	---	---	---	510	490	---	---	---	---	---	---
24	---	---	---	---	560	500	---	---	---	---	---	---
25	---	---	---	---	580	560	760	760	---	---	---	---
26	---	---	---	---	---	---	780	760	---	---	---	---
27	---	---	---	---	---	---	840	780	---	---	---	---
28	---	---	---	---	---	---	860	840	---	---	---	---
29	---	---	---	---	---	---	860	840	---	---	---	---
30	---	---	---	---	---	---	870	850	---	---	---	---
31	---	---	---	---	---	---	880	860	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	720	680	760	680	670	620	520	500	720	690	640	580
2	690	680	760	750	720	660	540	520	720	680	630	590
3	720	690	760	740	690	660	550	520	710	540	660	610
4	690	660	750	730	740	690	540	480	670	410	660	580
5	680	650	770	740	720	690	480	440	580	500	600	560
6	700	650	780	640	720	670	590	460	610	580	580	560
7	710	680	660	520	760	520	590	520	650	610	600	520
8	710	650	590	510	550	410	560	520	670	650	650	540
9	670	650	540	490	620	550	560	520	700	640	580	510
10	690	660	610	540	670	610	---	---	700	650	590	530
11	710	670	610	590	680	640	---	---	710	660	530	490
12	730	700	590	560	700	670	---	---	720	670	520	480
13	730	640	570	560	700	680	630	610	710	680	530	310
14	730	640	590	570	710	600	650	620	730	670	500	360
15	650	610	590	580	700	590	650	590	720	660	580	480
16	710	620	600	580	730	650	680	630	780	680	600	560
17	---	---	600	590	690	640	630	590	800	720	610	600
18	---	---	620	580	690	650	640	600	810	750	620	600
19	---	---	600	560	690	650	640	600	840	790	600	590
20	750	700	630	580	700	660	670	610	860	770	730	590
21	750	710	660	620	760	650	670	630	810	740	730	660
22	760	700	680	650	720	650	710	670	790	740	740	660
23	740	680	700	620	690	640	740	710	780	720	690	570
24	750	680	680	640	700	650	730	710	800	710	620	540
25	750	660	700	640	770	660	750	690	740	720	630	540
26	750	640	680	640	710	220	770	480	720	650	560	540
27	740	640	680	640	410	260	550	490	650	530	580	540
28	720	630	660	600	420	400	580	550	690	600	660	540
29	720	630	650	600	460	410	610	580	600	560	640	610
30	740	660	640	580	520	460	650	610	560	510	640	610
31	---	---	670	680	---	---	700	570	620	520	---	---
MONTH	760	610	780	490	770	220	770	440	860	410	740	310

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.7	7.4	---	---	---	---	---	---	7.9	7.7	---	---
2	---	---	---	---	7.7	7.5	---	---	7.9	7.8	---	---
3	---	---	---	---	7.9	7.6	---	---	7.8	7.8	---	---
4	---	---	---	---	8.1	7.7	---	---	7.8	7.7	---	---
5	---	---	---	---	8.1	7.8	---	---	7.8	7.6	---	---
6	---	---	---	---	8.2	7.9	---	---	---	---	---	---
7	---	---	---	---	8.3	7.5	---	---	---	---	---	---
8	---	---	---	---	8.0	7.2	---	---	---	---	---	---
9	---	---	---	---	8.8	7.2	---	---	---	---	---	---
10	---	---	---	---	8.0	7.3	---	---	---	---	---	---
11	---	---	---	---	7.9	7.7	---	---	---	---	---	---
12	---	---	---	---	7.9	7.6	---	---	---	---	---	---
13	---	---	---	---	7.7	7.5	---	---	---	---	---	---
14	---	---	---	---	7.7	7.5	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	7.7	7.3	---	---	---	---	---	---
23	---	---	---	---	7.6	7.3	---	---	---	---	---	---
24	---	---	---	---	7.6	7.5	---	---	---	---	---	---
25	---	---	---	---	7.6	7.5	7.7	7.5	---	---	---	---
26	---	---	---	---	---	---	7.8	7.5	---	---	---	---
27	---	---	---	---	---	---	7.8	7.8	---	---	---	---
28	---	---	---	---	---	---	7.8	7.7	---	---	---	---
29	---	---	---	---	---	---	7.9	7.6	---	---	---	---
30	---	---	---	---	---	---	7.9	7.8	---	---	---	---
31	---	---	---	---	---	---	8.0	7.8	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.5	8.0	7.8	8.3	8.1	7.7	7.6	7.6	7.4	7.6	7.5
2	7.5	7.4	7.8	7.8	8.1	8.0	7.7	7.3	7.6	7.5	7.7	7.5
3	7.4	7.3	7.9	7.7	8.1	7.9	7.3	7.2	7.7	7.5	7.7	7.6
4	7.4	7.3	7.7	7.7	8.2	8.0	7.6	7.1	7.7	7.3	7.7	7.5
5	7.5	7.4	7.7	7.5	8.2	7.9	7.5	7.1	8.0	7.5	7.6	7.5
6	7.4	7.3	7.6	7.5	8.2	7.8	7.7	7.4	7.5	7.4	7.5	7.4
7	7.5	7.3	7.5	7.5	8.0	7.7	7.7	7.4	7.6	7.4	7.6	7.4
8	7.8	7.3	7.6	7.5	8.1	7.8	7.7	7.5	7.7	7.5	7.5	7.4
9	7.8	7.7	7.6	7.5	8.1	7.8	7.7	7.5	7.6	7.5	7.6	7.4
10	7.8	7.8	7.6	7.5	8.0	7.6	---	---	7.6	7.5	7.5	7.3
11	7.8	7.8	7.6	7.6	7.9	7.7	---	---	7.6	7.5	7.4	7.2
12	7.9	7.7	7.6	7.6	7.8	7.7	---	---	7.6	7.6	7.4	7.3
13	7.8	7.7	7.6	7.5	7.7	7.6	7.5	7.4	7.7	7.6	7.5	7.4
14	7.7	7.7	7.6	7.5	7.7	7.6	7.6	7.4	7.7	7.4	7.5	7.5
15	7.7	7.6	7.6	7.5	7.7	7.6	7.7	7.4	7.6	7.5	7.5	7.4
16	7.7	7.7	7.7	7.6	7.7	7.5	7.8	7.4	7.6	7.4	7.5	7.4
17	---	---	7.7	7.6	7.7	7.5	7.8	7.4	7.8	7.5	7.5	7.4
18	---	---	7.8	7.6	7.7	7.5	7.7	7.6	8.1	7.6	7.4	7.4
19	---	---	7.8	7.6	7.6	7.5	7.8	7.6	7.9	7.6	7.4	7.4
20	8.3	7.9	7.8	7.8	7.6	7.5	7.9	7.6	7.8	7.6	7.5	7.4
21	8.5	7.8	7.8	7.7	7.6	7.5	7.9	7.6	8.1	7.6	7.5	7.4
22	8.5	8.4	7.8	7.7	7.7	7.5	7.9	7.6	7.9	7.8	7.5	7.4
23	8.5	8.4	7.8	7.7	7.7	7.5	7.8	7.7	8.0	7.7	7.5	7.4
24	8.5	8.4	7.8	7.7	7.7	7.5	7.8	7.7	8.0	7.7	7.4	7.4
25	8.5	8.4	7.8	7.7	7.7	7.5	7.8	7.7	7.9	7.6	7.6	7.4
26	8.4	8.2	7.8	7.7	7.7	7.5	7.8	7.4	7.7	7.6	7.6	7.4
27	8.2	8.1	7.8	7.7	7.8	7.7	7.6	7.4	7.7	7.5	7.6	7.5
28	8.1	7.9	7.9	7.7	7.9	7.7	7.6	7.4	7.6	7.5	7.6	7.3
29	8.0	8.0	7.8	7.7	7.8	7.6	7.6	7.5	7.6	7.5	7.4	7.2
30	8.0	7.9	8.4	7.8	7.7	7.6	7.6	7.5	7.5	7.4	7.4	7.3
31	---	---	8.5	8.3	---	---	7.7	7.6	7.6	7.4	---	---
MONTH	8.5	7.3	8.5	7.5	8.3	7.5	7.9	7.1	8.1	7.3	7.7	7.2

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.7	2.4	---	---	---	---	---	---	12.2	9.9	---	---
2	---	---	---	---	7.0	6.7	---	---	10.9	9.4	---	---
3	---	---	---	---	7.3	6.7	---	---	10.6	9.0	---	---
4	---	---	---	---	8.2	7.2	---	---	---	---	---	---
5	---	---	---	---	8.2	7.8	---	---	---	---	---	---
6	---	---	---	---	8.9	8.0	---	---	---	---	---	---
7	---	---	---	---	9.4	8.9	---	---	---	---	---	---
8	---	---	---	---	10.4	8.9	---	---	---	---	---	---
9	---	---	---	---	10.4	9.2	---	---	---	---	---	---
10	---	---	---	---	9.6	9.2	---	---	---	---	---	---
11	---	---	---	---	9.4	8.5	---	---	---	---	---	---
12	---	---	---	---	9.5	7.7	---	---	---	---	---	---
13	---	---	---	---	8.5	7.9	---	---	---	---	---	---
14	---	---	---	---	9.7	7.8	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	9.0	4.7	---	---	---	---	---	---
23	---	---	---	---	5.5	3.1	---	---	---	---	---	---
24	---	---	---	---	5.6	3.8	---	---	---	---	---	---
25	---	---	---	---	7.1	4.5	10.6	9.9	---	---	---	---
26	---	---	---	---	---	---	11.2	9.6	---	---	---	---
27	---	---	---	---	---	---	11.7	11.0	---	---	---	---
28	---	---	---	---	---	---	12.0	10.7	---	---	---	---
29	---	---	---	---	---	---	11.9	10.6	---	---	---	---
30	---	---	---	---	---	---	11.7	10.6	---	---	---	---
31	---	---	---	---	---	---	11.7	10.7	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.6	8.5	15.0	11.3	10.2	7.4	4.9	4.6	10.5	6.4	5.7	3.5
2	8.7	8.5	14.5	10.6	8.3	5.2	5.6	4.9	10.2	7.0	5.5	4.4
3	9.0	8.6	13.1	9.8	5.3	4.2	5.4	4.9	7.8	5.4	6.7	4.2
4	9.2	8.9	15.0	10.4	4.9	3.8	6.3	5.0	7.5	4.2	6.9	4.2
5	9.8	8.9	13.6	7.7	5.4	3.7	8.4	5.7	8.0	6.2	6.3	4.5
6	10.0	9.3	8.1	6.5	4.9	3.3	10.5	6.3	7.5	6.7	4.9	3.2
7	10.3	9.3	8.1	6.1	4.6	2.8	11.6	7.0	9.0	6.1	4.9	2.8
8	11.1	9.4	6.3	5.0	5.4	4.2	13.1	7.0	12.5	7.3	4.7	3.3
9	10.7	9.2	7.4	6.3	6.0	4.6	11.0	7.3	12.9	7.7	4.5	3.0
10	10.7	8.6	8.0	7.4	6.3	4.5	---	---	11.4	7.6	4.3	3.0
11	11.6	9.1	7.8	7.1	5.6	4.2	---	---	7.8	5.8	3.9	2.4
12	11.3	8.9	7.2	6.9	5.3	3.5	---	---	6.5	4.6	4.1	3.0
13	9.4	8.4	7.2	7.1	7.5	4.2	5.9	5.2	6.9	4.2	6.3	4.1
14	11.2	7.9	7.2	6.8	8.7	3.9	6.4	4.4	8.9	4.6	6.3	5.6
15	13.0	9.8	6.9	6.6	7.1	3.3	9.1	5.1	9.3	5.3	5.8	4.6
16	12.1	10.0	6.6	6.0	5.9	3.6	7.7	2.6	9.3	5.0	4.6	3.1
17	---	---	6.4	5.7	7.7	3.5	5.8	4.1	9.9	4.2	3.9	3.3
18	---	---	7.5	5.7	6.5	3.6	5.9	4.9	11.2	5.4	3.8	3.3
19	---	---	8.5	5.6	5.7	3.9	8.5	4.8	8.9	3.6	3.3	3.0
20	14.8	12.2	9.4	6.2	6.8	3.2	10.3	6.1	6.8	3.0	3.7	2.8
21	12.2	7.5	10.2	6.5	6.7	4.5	8.8	5.9	9.4	3.3	4.5	3.4
22	10.2	6.4	11.8	7.4	5.7	4.0	5.9	4.3	7.2	4.6	4.2	3.8
23	12.0	8.2	12.6	8.2	5.8	4.2	5.9	3.8	9.4	4.3	4.4	3.6
24	13.8	9.0	11.6	8.1	5.2	3.7	5.7	3.9	8.9	4.4	7.6	4.1
25	15.0	10.7	9.7	6.4	7.4	3.8	5.7	2.7	7.2	3.8	8.6	6.8
26	15.0	12.4	8.9	6.9	7.1	4.2	4.3	1.9	5.1	3.6	7.8	6.0
27	15.0	12.1	7.9	5.9	5.1	3.4	5.6	4.3	4.3	3.0	7.2	5.6
28	15.0	12.1	7.7	5.9	5.0	4.2	8.5	5.2	4.1	3.0	6.5	4.0
29	15.0	11.3	7.9	5.9	5.2	4.8	10.1	6.7	4.6	3.4	4.0	3.2
30	15.0	10.4	9.4	6.8	4.9	4.6	8.5	6.9	4.6	3.4	3.7	2.6
31	---	---	11.8	7.4	---	---	9.0	6.3	4.9	3.4	---	---
MONTH	15.0	6.4	15.0	5.0	10.2	2.8	13.1	1.9	12.9	3.0	8.6	2.4

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	13.5	---	---	---	---	---	---	1.5	0.5	---	---
2	---	---	---	---	13.0	12.5	---	---	2.0	1.0	---	---
3	---	---	---	---	13.0	12.0	---	---	2.5	1.5	---	---
4	---	---	---	---	12.5	9.0	---	---	---	---	---	---
5	---	---	---	---	9.0	8.5	---	---	---	---	---	---
6	---	---	---	---	8.5	5.5	---	---	---	---	---	---
7	---	---	---	---	5.5	5.0	---	---	---	---	---	---
8	---	---	---	---	5.0	4.5	---	---	---	---	---	---
9	---	---	---	---	6.0	5.0	---	---	---	---	---	---
10	---	---	---	---	8.0	6.0	---	---	---	---	---	---
11	---	---	---	---	9.0	8.0	---	---	---	---	---	---
12	---	---	---	---	10.0	9.0	---	---	---	---	---	---
13	---	---	---	---	9.5	8.5	---	---	---	---	---	---
14	---	---	---	---	9.0	7.0	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	5.5	4.5	---	---	---	---
26	---	---	---	---	---	---	5.5	3.0	---	---	---	---
27	---	---	---	---	---	---	3.0	0.5	---	---	---	---
28	---	---	---	---	---	---	1.5	0.5	---	---	---	---
29	---	---	---	---	---	---	1.5	0.5	---	---	---	---
30	---	---	---	---	---	---	2.0	1.0	---	---	---	---
31	---	---	---	---	---	---	1.0	0.5	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.0	15.5	13.5	22.0	20.0	26.0	24.5	24.0	22.5	24.5	23.5
2	11.0	9.5	15.5	14.5	23.0	21.0	26.0	24.0	24.0	23.5	24.5	23.0
3	11.0	9.0	14.5	13.5	23.5	22.0	26.0	24.0	24.5	23.0	23.0	22.5
4	11.0	9.5	14.5	12.5	25.0	22.5	26.0	23.5	23.5	21.0	24.0	22.0
5	11.5	10.0	14.5	13.5	26.0	24.0	26.0	24.0	22.0	21.0	24.5	23.0
6	11.0	9.5	15.0	13.5	27.0	25.0	26.0	24.5	24.0	21.5	25.5	24.0
7	10.5	8.5	15.5	14.5	26.5	23.5	26.5	24.5	25.0	22.5	24.5	23.5
8	12.0	9.5	15.0	14.0	24.5	21.5	26.5	25.0	25.0	23.5	25.5	24.0
9	13.5	11.0	15.0	14.0	24.5	22.0	26.5	26.0	25.5	24.5	26.0	24.0
10	13.5	11.0	16.0	14.5	24.0	21.0	---	---	26.0	24.5	25.5	24.5
11	14.0	11.5	16.0	15.0	24.5	22.0	---	---	26.0	25.0	25.5	23.5
12	15.5	13.0	15.5	15.0	24.5	23.5	---	---	25.5	23.5	23.5	22.0
13	17.0	15.0	15.0	14.0	24.5	23.0	25.5	24.0	25.5	23.5	22.0	20.5
14	15.5	14.0	16.0	13.5	24.5	23.0	26.0	24.5	25.5	23.5	22.0	20.0
15	15.0	13.5	16.5	14.5	24.5	23.5	26.0	24.0	25.5	24.0	23.5	21.0
16	15.0	13.5	19.0	16.0	25.5	23.0	27.0	25.0	25.5	24.0	23.0	21.5
17	---	---	20.5	17.5	25.5	23.0	27.0	25.0	25.5	24.0	21.5	21.0
18	---	---	22.0	19.0	26.0	24.0	26.0	24.5	25.5	23.5	21.0	21.0
19	---	---	22.5	20.0	26.0	24.5	25.0	23.5	25.5	23.5	21.0	20.5
20	18.5	17.0	22.5	21.0	26.5	24.5	25.0	23.0	25.5	24.5	21.0	20.5
21	18.0	15.5	22.0	20.0	26.0	25.5	25.0	23.0	26.5	24.5	20.5	19.0
22	15.5	14.0	22.0	19.5	26.0	24.5	25.5	23.5	26.0	24.5	20.5	18.5
23	15.0	13.5	21.0	19.0	26.5	24.5	25.5	24.0	25.0	23.5	20.5	19.5
24	15.0	14.0	21.5	19.5	27.0	25.0	25.0	24.0	24.5	23.0	19.5	18.5
25	16.0	13.5	21.0	19.0	26.5	25.5	25.0	23.0	24.0	22.5	19.0	18.0
26	16.0	14.5	19.5	18.0	26.5	19.0	25.0	23.5	23.5	21.5	19.5	19.0
27	15.5	14.0	19.5	18.0	24.0	21.0	24.5	23.0	23.5	22.0	21.0	19.5
28	16.0	14.0	18.5	16.5	25.5	23.5	24.5	23.0	23.0	21.5	22.5	20.5
29	15.5	14.5	18.0	16.5	26.0	24.0	25.0	23.5	23.5	21.0	23.5	21.5
30	15.0	13.0	20.0	17.0	26.5	24.5	24.5	22.5	24.0	22.5	24.0	23.0
31	---	---	21.0	18.5	---	---	24.0	22.0	24.5	23.0	---	---
MONTH	18.5	8.5	22.5	12.5	27.0	19.0	27.0	22.0	26.5	21.0	26.0	18.0

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1250	63	213	868	37	87	1830	38	188
2	1070	58	168	1050	50	142	1790	42	203
3	978	49	129	4730	336	4610	1570	42	178
4	886	43	103	5230	192	2710	1610	33	143
5	832	34	76	3050	124	1020	1930	25	130
6	760	35	72	2350	50	317	1970	18	96
7	696	57	107	2050	32	177	1790	18	87
8	680	60	110	1890	37	189	1690	20	91
9	696	30	56	1770	48	229	1610	15	65
10	728	63	124	1650	54	241	1490	24	97
11	1190	93	299	1610	46	200	1270	21	72
12	868	71	166	1550	44	184	1630	35	154
13	778	51	107	1510	52	212	4730	182	2480
14	978	37	98	1470	54	214	5410	169	2470
15	1270	31	106	1930	57	297	5160	120	1670
16	1450	30	117	3230	45	392	4430	79	945
17	1330	39	140	2790	55	414	4130	63	703
18	1330	42	151	2290	60	371	4570	106	1310
19	1230	48	159	2270	52	319	3810	29	298
20	1040	45	126	2210	40	239	3410	12	110
21	850	40	92	2390	51	329	3090	16	133
22	959	40	104	2310	55	343	7570	1190	32000
23	1040	40	112	2090	32	181	13000	1160	40700
24	959	33	85	1950	25	132	11700	351	11100
25	904	40	98	1850	23	115	9320	125	3150
26	868	47	110	1810	19	93	6960	43	808
27	814	50	110	1750	30	142	5080	31	425
28	778	45	95	1670	38	171	3770	50	509
29	760	40	82	1570	34	144	3150	45	383
30	778	40	84	1550	45	188	2870	28	217
31	832	37	83	--	--	--	2670	22	159
TOTAL	29582	--	3682	64438	--	14402	125010	--	101074

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2470	28	187	1000	16	43	17800	161	7740
2	2310	25	156	1000	17	46	14300	141	5440
3	2210	20	119	1000	29	78	11900	122	3920
4	4150	151	2220	1530	42	184	10500	103	2920
5	11000	394	11700	12400	786	29500	8060	85	1850
6	9930	112	3000	14800	550	22000	7190	90	1750
7	7270	61	1200	12800	154	5320	16700	510	23000
8	4800	43	557	9570	48	1240	18700	330	16700
9	3800	20	205	5700	58	893	14700	154	6110
10	3300	17	151	3600	103	1000	11500	74	2300
11	3000	13	105	3300	88	784	10300	62	1720
12	2700	13	95	3400	83	762	11500	159	4940
13	2400	13	84	7950	112	2400	13000	160	5620
14	4070	129	1740	7820	122	2580	14900	187	7520
15	5410	341	4980	5160	81	1130	16400	212	9390
16	4150	226	2530	4150	48	538	16500	317	14100
17	3410	134	1230	4490	58	881	15900	136	5840
18	3000	32	259	12200	519	17100	13700	93	3440
19	2600	20	140	13800	330	12300	10600	80	2290
20	2300	14	87	16300	270	11900	9410	68	1730
21	2000	13	70	18600	330	16600	8900	65	1560
22	1800	16	78	32600	1570	147000	8410	63	1430
23	1700	15	69	39300	792	84000	7760	48	1010
24	1600	21	91	33800	584	53300	7320	49	968
25	1500	23	93	33900	546	50000	6150	55	913
26	1400	17	64	26600	316	22700	5310	60	860
27	1300	21	74	21500	210	12200	4650	56	703
28	1200	17	55	19600	184	9740	4190	48	543
29	1100	9	27	--	--	--	3750	96	972
30	1100	10	30	--	--	--	3390	68	622
31	1000	18	49	--	--	--	3150	43	366
TOTAL	99980	--	31445	367870	--	506219	326540	--	138267

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2990	118	953	1290	29	101	1630	37	163
2	2930	90	712	1270	28	96	1510	29	118
3	2670	36	260	1310	38	134	1430	29	112
4	2490	32	215	1490	43	173	1370	30	111
5	2330	34	214	1430	41	158	1370	22	81
6	2230	20	120	1950	86	531	1590	30	129
7	2150	10	58	4710	452	7070	2650	134	1260
8	2030	13	71	14100	744	28300	3290	330	3240
9	1970	72	383	15800	345	14700	2010	153	830
10	1890	97	495	13600	161	5910	1910	84	433
11	1790	92	445	11500	145	4500	1790	74	358
12	1730	41	192	10600	127	3630	1570	73	309
13	1710	32	148	7950	90	1930	1330	72	259
14	1770	33	158	6560	78	1380	1550	105	439
15	1750	19	90	5940	78	1250	1770	123	588
16	1710	25	115	4790	50	647	2010	112	608
17	1670	34	153	3990	38	409	2130	82	472
18	1650	38	169	3570	55	530	1850	54	270
19	1630	31	136	2990	42	339	1510	37	151
20	1590	25	107	2730	65	479	1390	53	199
21	1550	16	67	2530	72	492	1350	58	211
22	1530	18	74	2330	55	346	1390	70	263
23	1490	25	101	2130	37	213	1330	63	226
24	1450	16	63	1930	61	318	1150	73	227
25	1390	25	94	2030	69	378	1070	80	231
26	1350	30	109	3010	63	512	14400	2260	94900
27	1290	29	101	2530	57	389	19700	1350	71800
28	1330	28	101	2430	15	98	13600	720	26400
29	1430	30	116	2470	17	113	10100	480	13100
30	1390	32	120	2130	57	328	7360	232	4610
31	--	--	--	1850	58	290	--	--	--
TOTAL	54880	--	6140	142940	--	75744	107110	--	222098

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5180	175	2450	1150	56	174	1020	80	220
2	4230	172	1960	1070	37	107	959	69	179
3	4190	148	1670	1170	114	435	940	48	122
4	3070	126	1040	2330	241	1700	1090	56	165
5	2390	105	678	2630	115	817	1290	58	202
6	2050	98	542	2130	103	592	1110	58	174
7	1830	79	390	1590	76	326	1490	253	1020
8	1530	53	219	1270	39	134	2770	327	2450
9	1550	98	469	1130	53	162	2050	173	958
10	2090	87	597	1040	58	163	1550	127	531
11	3030	338	2770	997	53	143	1390	100	375
12	2250	230	1400	940	52	132	1250	94	317
13	2130	86	495	922	60	149	2890	415	3370
14	1750	35	165	868	72	169	1870	179	904
15	2370	140	896	832	56	126	1570	118	500
16	2650	163	1170	904	106	259	1370	100	370
17	2490	88	592	832	156	350	1190	87	280
18	1750	58	274	760	93	191	1110	76	228
19	1450	73	286	696	89	167	1040	90	253
20	1250	41	138	664	90	161	978	73	193
21	1130	49	149	664	109	195	1290	84	340
22	1050	46	130	886	167	399	2250	145	881
23	959	41	106	796	75	161	1890	110	561
24	1020	103	284	696	52	98	1730	92	430
25	2670	168	1530	680	77	141	1590	93	399
26	3470	252	2360	1310	84	297	1550	92	385
27	1930	170	886	2330	202	1270	1670	98	442
28	1510	99	404	3090	142	1180	1990	109	586
29	1350	60	219	1810	66	323	1750	78	369
30	1310	63	223	1290	60	209	1510	90	367
31	1250	68	230	1090	63	185	--	--	--
TOTAL	66879	--	24722	38567	--	10915	46147	--	17571

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	1469943
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	1152279

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
DEC. 22,1970	1630	9.0	10300	1970	54800	30	42	53	67	85	93	99	100	--	--	--
FEB. 24,1971	1350	4.0	33900	557	51000	56	71	79	88	95	97	99	99	100	--	--
MAR. 7.....	1430	4.0	18400	598	29700	51	65	78	90	99	100	--	--	--	--	--
JUNE 26.....	1930	--	19000	2510	129000	47	61	71	81	91	94	96	97	98	100	--

03237100 SCIOTO RIVER AT LUCASVILLE, OHIO
(Radiochemical station)

LOCATION.--Lat 38°52'32", long 83°00'52", Scioto County, at bridge on State Highway 348 at Lucasville, 0.4 mile downstream from Miller Run, and 4.9 miles upstream from Scioto Brush Creek.

DRAINAGE AREA.--6,178 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1971.
Water temperatures: October 1956 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum daily, 755 micromhos Feb. 2; minimum daily, 271 micromhos Feb. 24.
Water temperature: Maximum, 28.0°C July 9, 18; minimum, freezing point Jan. 29, 31, Feb. 1, 2.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)
OCT.										
01...	1000	--	--	192	0	157	77	30	.4	--
13...	1000	--	--	259	5	221	133	49	.5	--
22...	1400	70	79	--	--	190	--	40	--	.15
25...	1000	--	--	224	10	200	122	47	.6	--
NOV.										
01...	1000	--	--	233	11	209	118	46	.5	--
06...	0800	--	--	162	4	139	75	28	.2	--
18...	1430	60	75	--	--	167	--	31	--	--
20...	0800	--	--	194	8	172	98	35	.4	--
DEC.										
08...	0800	--	--	213	9	189	100	41	.4	--
15...	1430	40	95	--	--	125	--	30	--	.03
19...	0800	--	--	202	0	166	92	32	.3	--
24...	0800	--	--	112	0	92	54	13	.3	--
JAN.										
13...	0800	--	--	230	0	189	70	30	.4	--
16...	0800	--	--	133	0	109	59	18	.3	--
26...	1430	190	62	--	--	202	--	34	--	--
31...	1000	--	--	270	0	221	89	44	.5	--
FEB.										
02...	0800	--	--	251	12	226	92	46	.8	--
15...	0800	--	--	118	0	97	58	35	.4	--
24...	0800	--	--	93	0	76	30	10	.2	--
25...	1500	50	77	--	--	80	--	14	--	.11
MAR.										
01...	0800	--	--	139	0	114	44	16	.3	--
07...	0900	--	--	182	6	159	52	23	.3	--
30...	0800	--	--	240	0	197	70	28	.4	--
30...	1430	50	82	--	--	195	--	27	--	--
APR.										
03...	1000	--	--	223	13	204	95	29	.4	--
18...	1000	--	--	242	14	221	110	35	.5	--
27...	1000	--	--	283	0	232	110	40	.5	--
29...	1445	60	17	--	--	203	--	40	--	.02
MAY										
03...	1000	--	--	259	0	212	110	43	.6	--
08...	1000	--	--	130	0	107	68	18	.3	--
20...	1515	40	20	--	--	156	--	24	--	--
22...	1000	--	--	210	0	172	84	29	.4	--
JUNE										
06...	1000	--	--	269	0	221	98	33	.4	--
16...	1430	90	68	--	--	154	--	30	--	.00
24...	1000	--	--	242	0	198	99	33	.5	--
27...	1000	--	--	140	0	115	37	8.0	.3	--
JULY										
05...	1000	--	--	214	0	176	70	22	.5	--
14...	1000	--	--	192	4	164	69	22	.5	--
22...	1430	40	30	--	--	202	--	30	--	--
23...	1000	--	--	232	10	207	87	32	.5	--
AUG.										
15...	1000	--	--	256	0	210	90	36	.0	--
24...	1430	50	18	--	--	221	--	50	--	.01
26...	1000	--	--	226	0	185	91	36	.6	--
SEP.										
04...	1000	--	--	115	0	94	52	17	.3	--
16...	1000	--	--	208	0	171	60	26	.4	--
23...	1000	--	--	258	0	212	100	44	.7	--
29...	1530	60	18	--	--	161	--	26	--	--

03237100 SCIOTO RIVER AT LUCASVILLE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance: Maximum daily, 1,100 micromhos Jan. 23, 1970; minimum daily, 207 micromhos May 8, 1961.
Water temperatures: Maximum, 29.0°C July 22, 1957, July 20, 21, Aug. 7, 1960; minimum freezing point on many days during winter periods.

REMARKS.--Samples for iron and manganese were filtered clear when collected. Daily samples were collected at this station and samples were selected for analysis on the following basis: (1) Maximum daily specific conductance for each month, (2) minimum daily specific conductance for each month, (3) median daily specific conductance for each month, and (4) a special sample was collected each month as part of the Environmental Protection Agency national network. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (N) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)
OCT.									
01...	--	9.0	1.3	--	--	328	230	72	532
13...	--	9.2	2.2	--	--	476	320	99	753
22...	2.1	--	--	.60	.48	--	290	--	645
25...	--	9.3	1.6	--	--	442	290	90	697
NOV.									
01...	--	8.1	1.6	--	--	444	290	80	707
06...	--	10	.91	--	--	314	200	60	484
18...	--	--	--	--	--	--	260	--	600
20...	--	7.9	.85	--	--	362	250	78	581
DEC.									
08...	--	13	2.8	--	--	424	340	150	688
15...	2.5	--	--	.71	.50	--	220	--	525
19...	--	11	1.0	--	--	374	260	94	594
24...	--	12	.76	--	--	222	150	58	348
JAN.									
13...	--	15	.69	--	--	414	280	91	619
16...	--	10	.45	--	--	262	170	61	405
26...	--	--	--	--	--	--	300	--	680
31...	--	13	1.5	--	--	482	320	98	741
FEB.									
02...	--	14	1.7	--	--	490	330	104	755
15...	--	12	1.2	--	--	236	160	64	429
24...	--	11	.07	--	--	166	110	34	271
25...	3.2	--	--	.28	.17	--	130	--	315
MAR.									
01...	--	18	.50	--	--	220	180	66	398
07...	--	18	.57	--	--	292	240	81	507
30...	--	17	.77	--	--	346	290	93	616
30...	--	--	--	--	--	--	290	--	675
APR.									
03...	--	12	.93	--	--	380	300	96	621
18...	--	8.9	1.5	--	--	392	310	88	667
27...	--	3.9	2.1	--	--	430	320	88	720
29...	.6	--	--	.57	.37	--	300	--	684
MAY									
03...	--	12	1.9	--	--	462	330	120	718
08...	--	11	.84	--	--	264	170	64	406
20...	--	--	--	--	--	--	250	--	560
22...	--	14	1.1	--	--	382	260	88	577
JUNE									
06...	--	12	1.6	--	--	430	320	99	696
16...	1.9	--	--	.68	.35	--	230	--	550
24...	--	10	1.4	--	--	394	280	81	656
27...	--	17	.31	--	--	202	150	36	326
JULY									
05...	--	22	1.7	--	--	324	270	94	553
14...	--	17	1.3	--	--	284	250	86	505
22...	--	--	--	--	--	--	270	--	625
23...	--	6.3	.89	--	--	360	300	93	630
AUG.									
15...	--	7.5	1.1	--	--	384	300	90	665
24...	.9	--	--	54	.50	--	310	--	700
26...	--	.9	1.3	--	--	364	280	94	635
SEP.									
04...	--	3.7	.60	--	--	206	140	46	349
16...	--	5.1	1.0	--	--	326	220	50	566
23...	--	8.6	2.0	--	--	440	300	88	727
29...	--	--	--	--	--	--	230	--	540

03237100 SCIOTO RIVER AT LUCASVILLE, OHIO--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	PH (UNITS)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	PHENOLS (UG/L)
OCT.									
01...	7.3	--	--	--	--	--	--	--	--
13...	8.3	--	--	--	--	--	--	--	--
22...	7.5	30	30	5.8	57	12	4400	100	--
25...	8.5	--	--	--	--	--	--	--	--
NOV.									
01...	8.5	--	--	--	--	--	--	--	--
06...	8.3	--	--	--	--	--	--	--	--
18...	7.0	20	40	10.2	85	7.2	82000	6400	--
20...	8.4	--	--	--	--	--	--	--	--
DEC.									
08...	8.4	--	--	--	--	--	--	--	--
15...	7.5	17	85	10.8	86	6.2	66000	14000	0
19...	7.7	--	--	--	--	--	--	--	--
24...	7.9	--	--	--	--	--	--	--	--
JAN.									
13...	7.8	--	--	--	--	--	--	--	--
16...	8.2	--	--	--	--	--	--	--	--
26...	7.5	50	20	10.8	81	5.8	36000	3500	--
31...	7.4	--	--	--	--	--	--	--	--
FEB.									
02...	8.5	--	--	--	--	--	--	--	--
15...	8.0	--	--	--	--	--	--	--	--
24...	8.0	--	--	--	--	--	--	--	--
25...	7.4	60	190	11.8	81	6.0	10000	1800	--
MAR.									
01...	7.3	--	--	--	--	--	--	--	--
07...	8.3	--	--	--	--	--	--	--	--
30...	7.5	--	--	--	--	--	--	--	--
30...	7.5	6	30	9.0	79	3.8	1900	160	3
APR.									
03...	8.6	--	--	--	--	--	--	--	--
10...	8.5	--	--	--	--	--	--	--	--
27...	7.4	--	--	--	--	--	--	--	--
29...	7.6	15	25	10.4	100	15	420	24	--
MAY									
03...	8.2	--	--	--	--	--	--	--	--
08...	7.1	--	--	--	--	--	--	--	--
20...	7.4	15	30	8.8	100	2.6	5600	270	--
22...	8.2	--	--	--	--	--	--	--	--
JUNE									
06...	7.6	--	--	--	--	--	--	--	--
16...	7.2	15	95	6.4	77	4.8	20000	1600	6
24...	7.6	--	--	--	--	--	--	--	--
27...	7.1	--	--	--	--	--	--	--	--
JULY									
05...	8.1	--	--	--	--	--	--	--	--
14...	8.4	--	--	--	--	--	--	--	--
22...	8.0	30	20	13.6	160	3.2	7600	210	--
23...	8.5	--	--	--	--	--	--	--	--
AUG.									
15...	7.6	--	--	--	--	--	--	--	--
24...	8.0	25	15	14.0	160	7.4	740	--	--
26...	7.4	--	--	--	--	--	--	--	--
SEP.									
04...	7.4	--	--	--	--	--	--	--	--
16...	7.6	--	--	--	--	--	--	--	--
23...	7.4	--	--	--	--	--	--	--	--
29...	8.0	25	35	8.2	99	7.4	18000	300	0

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	DIS-SOLVED STRON-TIUM 90 (PC/L)
OCT. 22-DEC. 15	<3.1	<1.0	6.5	7.9	380	1.4	.5	1.3	1.5	17	840	.8
JAN. 26-MAR. 30	<7.7	<2.6	7.4	8.4	550	2.6	.9	1.9	2.1	25	770	.6
APR. 29-JUNE 16	11	3.7	8.3	9.9	400	< .4	< .1	.4	.4	2	1000	.5
JULY 22-SEPT. 29	5.7	1.9	7.3	9.0	420	4.2	1.4	3.1	3.8	60	1200	.5

03237100 SCIOTO RIVER AT LUCASVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
(ONCE-DAILY MEASUREMENT, USUALLY BETWEEN 0800 AND 1000)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	532	707	625	612	738	398	624	702	629	479	570	555
2	538	633	624	641	755	421	624	710	655	489	632	561
3	574	635	654	641	754	419	621	718	673	529	667	558
4	611	564	652	631	---	487	636	706	667	553	664	349
5	642	540	657	472	397	481	644	706	669	553	299	487
6	644	484	654	471	398	516	647	678	696	552	307	573
7	677	486	663	454	466	507	653	534	---	550	393	502
8	713	487	688	541	462	388	657	406	619	571	434	545
9	687	574	669	548	502	433	658	439	411	598	510	613
10	736	603	667	592	487	428	652	475	523	579	563	575
11	735	632	681	594	552	473	654	565	585	431	591	560
12	733	651	680	622	547	469	668	574	645	330	601	572
13	753	602	566	619	553	422	669	501	675	378	608	542
14	726	603	571	605	424	424	676	463	671	505	639	547
15	713	638	548	411	429	481	664	494	676	564	665	403
16	734	576	551	405	448	466	677	523	578	602	679	506
17	679	580	603	490	448	467	668	468	628	621	704	566
18	682	571	598	488	464	516	667	494	667	602	725	618
19	699	570	594	558	473	514	688	513	686	598	730	649
20	702	581	588	549	387	510	699	517	686	601	743	665
21	668	546	585	623	388	509	703	562	683	588	738	678
22	668	542	508	634	384	545	---	577	691	619	748	686
23	689	578	509	632	284	543	710	604	683	630	754	727
24	699	578	348	649	271	564	---	621	656	653	748	724
25	697	618	362	649	320	562	713	624	665	670	740	685
26	694	614	521	669	326	558	707	589	581	681	635	573
27	700	630	556	668	326	561	720	598	326	677	652	510
28	708	624	565	685	399	608	714	621	395	477	550	537
29	717	630	575	717	---	603	710	618	404	498	642	520
30	692	623	574	715	---	616	690	620	431	532	564	502
31	706	---	608	741	---	605	---	646	---	561	550	---
MONTH	682	590	589	591	459	500	672	576	605	557	614	575

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
(ONCE-DAILY MEASUREMENT, USUALLY BETWEEN 0800 AND 1000)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	14.0	11.0	2.0	0.0	6.0	10.0	14.0	17.0	26.0	22.0	24.0
2	17.0	14.0	12.0	4.0	0.0	7.0	10.0	13.0	18.0	25.0	23.0	25.0
3	18.0	13.0	11.0	4.0	1.0	5.0	9.0	13.0	19.0	24.0	24.0	25.0
4	16.0	12.0	11.0	5.0	---	5.0	8.0	13.0	20.0	25.0	24.0	24.0
5	15.0	12.0	9.0	5.0	4.0	4.0	9.0	13.0	21.0	25.0	22.0	25.0
6	16.0	10.0	8.0	4.0	---	5.0	9.0	14.0	21.0	26.0	22.0	25.0
7	17.0	11.0	5.0	3.0	---	5.0	8.0	15.0	---	26.0	23.0	26.0
8	17.0	11.0	5.0	3.0	---	5.0	11.0	15.0	24.0	27.0	24.0	25.0
9	19.0	11.0	6.0	2.0	---	4.5	12.0	14.0	22.0	28.0	25.0	26.0
10	18.0	13.0	7.0	3.0	---	5.0	14.0	15.0	22.0	26.0	25.0	26.0
11	18.0	13.0	7.0	4.0	---	4.0	12.0	17.0	23.0	25.0	27.0	25.0
12	18.0	13.0	8.0	4.0	---	5.0	15.0	17.0	24.0	24.0	24.0	24.0
13	19.0	14.0	9.0	5.0	2.0	7.0	15.0	14.0	23.0	24.0	24.0	23.0
14	19.0	13.0	7.0	5.0	1.0	8.0	13.0	13.0	24.0	25.0	23.0	23.0
15	18.0	12.0	7.0	5.0	4.0	10.0	13.0	15.0	24.0	26.0	25.0	23.0
16	15.0	9.0	8.0	4.0	3.0	9.0	14.0	17.0	24.0	26.0	25.0	22.0
17	14.0	7.0	7.0	4.0	4.0	8.0	15.0	18.0	25.0	27.0	23.0	23.0
18	13.0	8.0	8.0	3.0	4.0	6.0	15.0	19.0	24.0	28.0	25.0	22.0
19	13.0	9.0	7.0	2.0	5.0	7.0	16.0	20.0	25.0	26.0	25.0	22.0
20	14.0	11.0	7.0	2.0	6.0	6.0	17.0	22.0	25.0	26.0	26.0	24.0
21	14.0	8.0	6.0	1.0	6.0	7.0	14.0	20.0	26.0	25.0	26.0	21.0
22	14.0	8.0	7.0	3.0	6.0	7.0	---	18.0	25.0	23.0	25.0	19.0
23	14.0	7.0	7.0	3.0	6.0	6.0	12.0	16.0	24.0	24.0	25.0	23.0
24	14.0	4.0	5.0	4.0	5.0	5.0	---	18.0	24.0	24.0	23.0	18.0
25	15.0	3.0	6.0	4.0	4.0	5.0	12.0	19.0	25.0	24.0	24.0	18.0
26	15.0	4.0	4.0	4.0	4.0	6.0	14.0	17.0	24.0	25.0	23.0	19.0
27	15.0	5.0	4.0	2.0	4.0	5.0	14.0	18.0	22.0	24.0	23.0	21.0
28	16.0	8.0	3.0	1.0	7.0	7.0	15.0	17.0	25.0	23.0	23.0	20.0
29	15.0	8.0	1.0	0.0	---	9.0	15.0	17.0	25.0	24.0	22.0	21.0
30	15.0	9.0	1.0	1.0	---	8.0	14.0	16.0	26.0	23.0	22.0	22.0
31	15.0	---	3.0	0.0	---	9.0	---	17.0	---	23.0	23.0	---
MONTH	16.0	10.0	6.5	3.0	---	6.5	12.5	16.5	23.0	25.0	24.0	23.0

03237290 UPPER TWIN CREEK AT McGAW, OHIO
(Hydrologic bench-mark, pesticide, and radiochemical station)

LOCATION.--Lat 38°38'14", long 83°13'31", Scioto County, at gaging station on right bank at downstream side of bridge on U.S. Highway 52 at McGaw, 2 miles northeast of Buena Vista, and 2.8 miles upstream from mouth.

DRAINAGE AREA.--12.8 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1964-67 (partial-record station); August 1967 to September 1971.
Water temperatures: October 1963 to September 1966, October 1967 to September 1971.
Sediment records: Water years 1964-69 (partial-record station), October 1969 to September 1971.

EXTREMES.--1970-71:
Sediment concentrations: Maximum daily, 101 mg/l May 5; minimum daily, 0 mg/l on many days during October to January, April, July to September.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)
OCT. 22...	1600	1.9	9.0	60	0	6.7	4.4	3.4	2.3	21	0	22
NOV. 18...	0940	6.6	13	30	38	6.3	4.2	3.2	2.1	20	0	20
DEC. 15...	1000	9.4	11	30	57	5.6	3.7	3.0	2.1	16	0	19
JAN. 26...	1000	5.0	12	10	37	4.5	3.5	2.9	1.9	11	0	20
FEB. 25...	1045	23	9.0	40	130	4.0	3.1	2.2	1.6	9	0	18
MAR. 30...	1000	5.8	10	20	68	4.0	4.0	2.7	1.6	11	0	23
APR. 29...	1000	9.0	9.8	60	15	5.8	4.0	3.1	2.0	13	0	25
MAY 20...	1045	12	11	40	120	5.3	3.3	2.6	2.0	12	0	21
JUNE 16...	1010	13	11	20	0	5.2	3.6	2.6	1.8	20	0	18
JULY 22...	1030	3.4	11	40	8	8.0	4.4	3.6	2.6	20	0	26
AUG. 24...	1020	4.2	11	30	3	7.7	3.1	2.7	2.6	24	0	19
SEP. 29...	1045	3.8	10	0	0	8.0	2.7	2.7	2.1	26	0	19

DATE	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)
OCT. 22...	10.4	101	2.0	110	0	1	--
NOV. 18...	12.4	102	1.2	60	--	--	--
DEC. 15...	13.6	105	.3	260	--	--	--
JAN. 26...	13.6	98	1.0	54	--	--	--
FEB. 25...	13.4	102	.4	0	--	--	--
MAR. 30...	12.0	97	1.4	0	--	--	--
APR. 29...	10.0	98	.1	100	--	--	--
MAY 20...	9.8	100	.2	260	--	--	--
JUNE 16...	8.4	89	.3	0	0	0	0
JULY 22...	9.2	98	.2	920	--	--	--
AUG. 24...	7.0	74	.0	3700	--	--	--
SEP. 29...	9.6	110	.0	600	--	--	--

DATE	TIME	DIS-SOLVED NATURAL URANIUM (U) (UG/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)
SEP., 1971 28...	1700	.03	.06	<.6	<.2	2.7	3.4

03237280 UPPER TWIN CREEK AT McGAW, OHIO--Continued

EXTREMES.--1970-71--Continued
Sediment discharges: Maximum daily, 40 tons Dec. 22; minimum daily, 0 tons on many days during October to January, April, July to September.

Period of record:
Water temperatures (1963-66, 1967-68): Maximum, 30.0°C July 27, 1964; minimum, freezing point on many days during January and February 1968.
Sediment concentrations (1970-71): Maximum daily, 101 mg/l May 5, 1971; minimum daily, 0 mg/l on many days during October to December 1970, January, April, July to September 1971.
Sediment discharges (1970-71): Maximum daily, 40 tons Dec. 22, 1970; minimum daily, 0 tons on many days during October to December 1970, January, April, July to September 1971.

REMARKS.--No temperature record Oct. 1 to Sept. 30 due to faulty recorder and shifting channel conditions. Flow affected by ice Feb. 4, 5, 8-11. No pesticide samples obtained during water year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)
OCT. 22...	4.0	.1	.8	.03	65	34	17	101	7.1	14.5	2
NOV. 18...	3.0	.0	2.1	.07	66	32	16	97	6.8	7.0	2
DEC. 15...	3.0	.2	2.8	.02	59	29	16	89	6.7	4.5	2
JAN. 26...	4.0	.1	1.8	.02	56	26	17	81	6.8	2.0	2
FEB. 25...	3.0	.1	1.3	.03	54	23	16	70	6.7	4.0	5
MAR. 30...	2.0	.3	.4	.01	53	30	21	81	6.8	6.5	5
APR. 29...	3.0	.0	1.2	.00	62	31	20	93	6.[illegible]	11.0	5
MAY 20...	2.0	.0	.3	.00	55	26	16	77	6.7	17.0	5
JUNE 16...	1.0	.1	.5	.01	54	28	12	82	7.5	19.0	4
JULY 22...	3.0	.0	2.6	.31	69	38	22	108	6.9	19.0	5
AUG. 24...	2.0	.0	.6	.00	55	32	12	89	7.2	19.0	10
SEP. 29...	1.0	.1	.2	.00	58	31	10	87	7.2	21.0	2

DATE	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT. 22...	0	0	0	.2	31	220
NOV. 18...	--	--	--	--	--	--
DEC. 15...	--	--	--	--	--	--
JAN. 26...	--	--	--	--	--	--
FEB. 25...	--	--	--	--	--	--
MAR. 30...	--	--	--	--	--	--
APR. 29...	--	--	--	--	--	--
MAY 20...	--	--	--	--	--	--
JUNE 16...	0	2	2	--	2	20
JULY 22...	--	--	--	--	--	--
AUG. 24...	--	--	--	--	--	--
SEP. 29...	--	--	--	--	--	--

DATE	TOTAL FILTRABLE RESIDUE (MG/L)	SUSPENDED GROSS ALPHA AS U-NAT. (UG/L)	SUSPENDED GROSS ALPHA AS U-NAT. (PC/L)	SUSPENDED GROSS BETA AS SR90 /Y90 (PC/L)	SUSPENDED GROSS BETA AS CS-137 (PC/L)	TOTAL NON-FILTRABLE RESIDUE (MG/L)
SEP., 1971 28...	55	<.4	<.1	<.4	<.4	<1

03237280 UPPER TWIN CREEK AT McGAW, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.4	1	0	1.9	0	0	3.4	2	.02
2	1.1	0	0	3.6	1	.01	3.4	2	.02
3	.84	0	0	7.8	2	.04	3.4	2	.02
4	.76	0	0	5.4	1	.01	5.0	2	.03
5	.70	0	0	3.8	0	0	5.4	2	.03
6	.65	0	0	2.8	0	0	5.0	2	.03
7	.60	0	0	2.1	0	0	4.6	2	.02
8	.55	0	0	1.7	0	0	4.2	2	.02
9	.55	0	0	1.7	0	0	3.8	2	.02
10	.76	0	0	1.7	0	0	3.8	2	.02
11	1.2	0	0	1.4	0	0	4.2	2	.02
12	1.6	0	0	1.2	0	0	44	38	8.5
13	1.2	0	0	1.1	0	0	12	4	.13
14	--	--	--	--	--	--	9.4	4	.10
15	--	--	--	--	--	--	9.4	4	.10
16	--	--	--	14	1	.04	9.0	4	.10
17	--	--	--	9.0	0	0	17	4	.18
18	1.9	0	0	6.6	0	0	10	2	.05
19	1.4	0	0	5.0	0	0	10	1	.03
20	1.7	1	0	12	4	.13	9.8	0	0
21	1.9	2	.01	14	4	.15	20	9	.49
22	1.9	2	.01	10	3	.08	136	83	40
23	1.9	1	.01	7.8	3	.06	72	6	1.2
24	1.9	0	0	5.4	3	.04	53	3	.43
25	1.7	0	0	3.8	3	.03	31	2	.17
26	1.6	0	0	3.4	2	.02	19	1	.05
27	1.4	0	0	3.4	2	.02	15	1	.04
28	1.1	0	0	2.8	2	.02	14	1	.04
29	1.4	0	0	2.5	2	.01	12	1	.03
30	1.7	0	0	3.1	2	.02	9.8	1	.03
31	1.9	0	0	--	--	--	8.2	1	.02
TOTAL	35.31	--	.03	139.0	--	.68	566.8	--	51.94

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.6	1	.02	4.6	3	.04	17	4	.18
2	5.8	1	.02	2.8	3	.02	15	4	.16
3	5.4	1	.01	2.1	2	.01	15	4	.16
4	--	--	--	--	--	--	13	4	.14
5	--	--	--	--	--	--	13	5	.18
6	--	--	--	54	8	1.2	22	8	.48
7	--	--	--	36	6	.58	38	7	.72
8	--	--	--	--	--	--	30	6	.49
9	--	--	--	--	--	--	23	6	.37
10	4.2	0	0	--	--	--	25	6	.41
11	3.8	0	0	--	--	--	37	6	.60
12	3.4	1	.01	--	--	--	35	5	.47
13	5.6	1	.02	--	--	--	28	4	.30
14	88	2	.48	30	4	.32	22	4	.24
15	32	2	.17	23	4	.25	22	4	.24
16	24	2	.13	18	4	.19	21	4	.23
17	18	2	.10	16	4	.17	18	3	.15
18	14	2	.08	16	5	.22	16	3	.13
19	12	1	.03	15	5	.20	16	2	.09
20	9.8	1	.03	15	6	.24	15	2	.08
21	8.6	1	.02	13	6	.21	14	2	.08
22	7.4	0	0	70	61	14	--	--	--
23	6.6	0	0	--	--	--	--	--	--
24	5.4	0	0	--	--	--	--	--	--
25	4.6	0	0	--	--	--	--	--	--
26	5.0	0	0	--	--	--	--	--	--
27	6.2	2	.03	--	--	--	--	--	--
28	3.8	3	.03	17	4	.18	6.2	5	.08
29	3.8	2	.02	--	--	--	5.8	6	.09
30	4.6	3	.04	--	--	--	5.8	6	.09
31	6.2	4	.07	--	--	--	5.4	5	.07
TOTAL	294.8	--	1.31	332.5	--	17.83	478.2	--	6.23

03237280 UPPER TWIN CREEK AT McGAW, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.0	5	.07	6.2	2	.03	7.4	2	.04
2	5.8	4	.06	10	4	.11	8.6	3	.07
3	5.8	4	.06	15	2	.08	8.6	3	.07
4	5.4	4	.06	16	2	.09	7.8	4	.08
5	5.0	4	.05	25	101	10	7.0	4	.08
6	5.0	3	.04	64	46	11	6.6	4	.07
7	5.4	2	.03	53	33	6.4	7.4	4	.08
8	5.0	2	.03	50	6	.81	9.0	4	.10
9	4.6	1	.01	34	3	.28	8.2	4	.09
10	4.2	0	[illegible]	23	3	.19	7.8	4	.08
11	3.8	0	0	18	3	.15	6.6	4	.07
12	3.4	0	0	15	3	.12	6.2	4	.07
13	3.4	0	0	--	--	--	8.6	4	.09
14	4.2	0	0	--	--	--	--	--	--
15	3.4	0	0	23	2	.12	--	--	--
16	3.4	0	0	19	1	.05	13	2	.07
17	3.4	0	0	21	2	.11	7.8	2	.04
18	3.4	0	0	17	2	.09	6.2	1	.02
19	3.1	0	0	12	2	.06	4.6	1	.01
20	2.8	0	0	13	2	.07	3.8	1	.01
21	3.1	0	0	15	3	.12	--	--	--
22	3.1	0	0	14	4	.15	--	--	--
23	2.8	0	0	12	4	.13	--	--	--
24	2.8	0	0	10	4	.11	--	--	--
25	2.5	0	0	12	4	.13	--	--	--
26	2.5	0	0	8.6	3	.07	29	42	5.6
27	2.5	0	0	9.8	3	.08	13	4	.14
28	12	3	.10	9.0	2	.05	7.0	2	.04
29	9.0	2	.05	8.6	2	.05	5.4	2	.03
30	6.6	2	.04	7.8	2	.04	3.4	1	.01
31	--	--	--	--	--	--	--	--	--
TOTAL	132.4	--	.60	541.0	--	30.69	193.0	--	6.96

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.3	1	.01	1.9	0	0	1.6	0	0
2	1.4	1	0	1.6	0	0	2.1	0	0
3	.95	1	0	1.2	0	0	5.0	0	0
4	.65	1	0	--	--	--	4.6	0	0
5	.42	1	0	--	--	--	3.4	0	0
6	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--
8	--	--	--	2.8	0	0	--	--	--
9	--	--	--	2.1	0	0	5.4	0	0
10	--	--	--	1.6	0	0	3.8	0	0
11	4.6	2	.02	1.2	0	0	3.1	0	0
12	3.8	2	.02	1.1	0	0	3.1	0	0
13	2.5	2	.01	.76	0	0	3.1	0	0
14	1.4	2	.01	.50	0	0	3.1	0	0
15	.84	2	0	.28	0	0	3.1	0	0
16	.55	2	0	.15	0	0	3.1	0	0
17	--	--	--	.11	0	0	4.2	0	0
18	2.1	2	.01	.09	0	0	4.6	0	0
19	--	--	--	.08	0	0	3.8	0	0
20	--	--	--	.07	0	0	3.4	0	0
21	5.8	2	.03	.06	0	0	3.1	0	0
22	3.1	2	.02	15	30	1.8	3.1	0	0
23	1.9	1	.01	9.1	1	.02	3.1	0	0
24	1.2	0	0	4.2	0	0	3.1	0	0
25	1.4	0	0	3.5	2	.02	3.1	0	0
26	2.8	0	0	48	44	8.1	6.9	0	0
27	2.8	0	0	16	2	.09	7.4	0	0
28	2.1	0	0	6.6	0	0	5.4	0	0
29	2.8	0	0	3.1	0	0	3.8	0	0
30	2.8	0	0	1.4	0	0	3.1	0	0
31	2.5	0	0	1.2	0	0	--	--	--
TOTAL	50.71	--	.14	123.70	--	10.03	102.6	--	0

03237280 UPPER TWIN CREEK AT McGAW, OHIO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

						PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
DATE	TIME	WATER TEMP-ERA-TURE (°C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
MAY 5, 1971	1615	11.0	36	468	45	16	23	31	43	64	86	99	100	--	--	--

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03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO

LOCATION.--Lat 39°35'00", long 84°01'49", Greene County, at gaging station on right bank at downstream side of bridge on New Burlington Road, 0.3 mile upstream from unnamed right bank tributary, 2.2 miles southwest of Spring Valley, and 2.8 miles downstream from Glady Run.

DRAINAGE AREA.--386 sq mi.

PERIOD OF RECORD.--Chemical analyses: September 1968 to September 1971.
Water temperatures: September 1968 to September 1971.

EXTREMES.--Period of record:
Specific conductance (1969-70): Maximum, 1,180 micromhos Jan. 1, Mar. 19, 1970; minimum, 270 micromhos May 13, 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.							
02...	1200	--	--	--	--	--	--
05...	0910	54	373	0	64	67	.7
13...	1840	146	239	15	53	68	.5
NOV.							
16...	1243	77	287	23	65	59	.7
19...	1140	67	370	0	68	63	.7
DEC.							
01...	0900	82	337	0	64	85	.5
23...	1345	433	256	16	70	40	1.8
JAN.							
04...	0815	630	201	7	50	43	.6
27...	1930	60	380	0	75	61	.9
FEB.							
07...	1545	362	366	11	80	160	.4
23...	0820	3200	116	0	28	16	.3
MAR.							
16...	1700	826	220	14	55	30	.3
26...	1500	308	296	16	63	42	.2
APR.							
26...	0850	126	348	0	61	51	.3
29...	1345	146	300	0	58	46	.3
MAY							
10...	1900	541	295	0	61	33	.3
24...	1700	148	296	24	63	46	.3
JUNE							
02...	1845	--	--	--	--	--	--
20...	2035	89	310	20	60	52	.3
27...	1150	99	106	0	21	7.7	.2
JULY							
23...	1045	96	304	24	65	56	.3
26...	0905	180	254	14	57	34	.2
AUG.							
18...	1103	80	312	22	65	62	.3
23...	1230	99	274	10	62	66	.2
SEP.							
16...	1100	93	312	24	59	64	.2
20...	1740	688	198	0	34	43	.2

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

EXTREMES.--Period of record--Continued
Water temperatures (1969-70): Maximum, 28.0°C July 2, Aug. 1, 1970; minimum, freezing point on several days during December 1969 and January 1970.

REMARKS.--Continuous water-quality recorder operated since September 1968. Maximum recorded specific conductance value of 1,570 micromhos occurred Feb. 1, 1971. Minimum recorded specific conductance value of 207 micromhos occurred Aug. 8, 1971. Maximum recorded water temperature value of 34.5°C occurred June 26, 1971. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water.

CHEMICAL ANALYSIS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
02...	--	--	--	--	--	5.0	1.6
05...	16	558	370	64	876	--	--
13...	15	456	280	58	728	--	--
NOV.							
16...	12	480	340	66	791	--	--
19...	13	532	370	66	866	--	--
DEC.							
01...	15	540	350	74	876	--	--
23...	13	434	310	73	684	--	--
JAN.							
04...	14	362	240	64	577	--	--
27...	13	528	390	78	896	--	--
FEB.							
07...	12	708	410	91	1180	--	--
23...	15	198	140	45	322	--	--
MAR.							
16...	32	366	300	96	616	--	--
26...	17	440	360	90	771	--	--
APR.							
26...	8.0	440	360	74	774	--	--
29...	7.9	446	320	74	715	--	--
MAY							
10...	34	423	350	110	680	--	--
24...	9.6	459	360	77	745	--	--
JUNE							
02...	--	--	--	--	--	13	1.3
20...	15	482	360	72	801	--	--
27...	18	170	130	43	293	--	--
JULY							
23...	10	514	370	80	792	--	--
26...	7.1	418	300	68	629	--	--
AUG.							
18...	10	544	370	78	844	--	--
23...	11	498	310	68	773	--	--
SEP.							
16...	16	512	360	64	830	--	--
20...	16	322	210	48	529	--	--

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	846	735	---	---	900	825	---	---	1570	1080	690	648
2	792	675	---	---	864	840	---	---	1080	991	714	690
3	864	729	---	---	861	840	---	---	991	940	729	714
4	879	789	---	---	879	750	---	---	---	---	936	726
5	876	756	---	---	789	696	---	---	---	---	825	789
6	879	765	---	---	---	---	---	---	---	---	795	585
7	894	768	---	---	---	---	---	---	---	---	621	558
8	882	711	---	---	---	---	---	---	---	---	663	585
9	870	759	---	---	---	---	---	---	---	---	705	663
10	879	849	---	---	818	810	---	---	---	---	720	693
11	918	882	---	---	828	800	---	---	---	---	1030	711
12	921	795	---	---	804	642	---	---	---	---	807	717
13	864	678	---	---	707	566	---	---	---	---	867	807
14	739	676	---	---	757	707	---	---	---	---	927	867
15	807	690	---	---	763	667	---	---	---	---	936	570
16	820	721	---	---	740	696	---	---	792	750	636	612
17	896	806	---	---	762	740	---	---	825	324	690	636
18	942	861	---	---	774	762	---	---	336	282	717	690
19	989	827	899	866	780	768	---	---	393	336	741	714
20	1010	747	879	834	776	758	883	865	393	357	723	711
21	973	730	829	664	786	758	898	868	510	384	744	723
22	836	668	795	717	780	740	883	859	513	315	759	729
23	883	673	815	785	780	710	883	865	423	312	792	756
24	932	749	815	791	716	698	880	865	579	423	789	762
25	921	681	842	800	746	708	886	853	636	579	786	765
26	853	670	849	822	774	732	907	862	678	636	786	738
27	886	691	855	837	786	750	915	877	651	594	762	732
28	898	559	861	840	834	786	940	886	648	600	762	732
29	850	610	873	849	806	794	901	883	---	---	756	732
30	---	---	891	855	---	---	919	883	---	---	771	744
31	---	---	---	---	---	---	1550	919	---	---	762	741
MONTH	1010	559	---	---	900	566	---	---	---	---	1030	558

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	762	741	801	774	---	---	788	753	840	816	956	920
2	786	678	801	777	---	---	813	725	861	928	962	914
3	744	693	822	657	---	---	838	813	840	477	962	821
4	753	726	774	678	---	---	860	830	846	768	862	604
5	750	738	795	750	---	---	880	860	780	693	820	670
6	768	741	792	324	---	---	887	878	759	714	865	520
7	768	747	603	456	---	---	903	600	738	507	790	589
8	768	732	516	327	---	---	707	407	798	207	823	712
9	771	744	597	498	---	---	705	637	774	708	868	793
10	777	702	660	594	---	---	753	673	846	726	867	723
11	786	744	684	609	---	---	763	748	864	810	846	330
12	777	738	---	---	---	---	---	---	858	711	690	438
13	798	759	---	---	---	---	---	---	801	555	795	600
14	840	732	---	---	---	---	786	765	855	654	879	792
15	780	732	---	---	---	---	792	777	816	588	894	837
16	795	762	---	---	807	773	804	789	873	552	882	843
17	798	774	---	---	840	807	831	762	894	849	900	873
18	801	777	---	---	850	827	792	774	918	832	924	900
19	801	762	---	---	870	850	795	783	868	823	936	897
20	804	774	---	---	853	828	819	789	871	808	927	432
21	798	762	---	---	853	703	822	792	865	844	669	429
22	789	762	---	---	858	810	813	795	861	720	759	669
23	768	732	---	---	880	858	822	786	864	630	792	750
24	786	735	---	---	895	803	816	324	834	711	864	453
25	777	732	---	---	813	240	576	351	861	831	780	432
26	771	714	---	---	490	278	639	567	852	723	750	459
27	771	726	---	---	683	490	750	591	840	666	681	438
28	756	474	---	---	747	683	762	663	851	659	747	540
29	759	570	---	---	800	747	816	603	815	740	825	708
30	789	753	---	---	803	703	786	630	854	737	789	510
31	---	---	---	---	---	---	828	792	920	830	---	---
MONTH	840	474	---	---	---	---	903	324	920	207	962	330

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	7.3	7.3
2	---	---	---	---	---	---	---	---	---	---	7.3	7.3
3	---	---	---	---	---	---	---	---	---	---	7.3	7.3
4	---	---	---	---	---	---	---	---	---	---	7.4	7.3
5	---	---	---	---	---	---	---	---	---	---	7.4	7.4
6	---	---	---	---	---	---	---	---	---	---	7.4	7.4
7	---	---	---	---	---	---	---	---	---	---	7.4	7.4
8	---	---	---	---	---	---	---	---	---	---	7.4	7.4
9	---	---	---	---	---	---	---	---	---	---	7.5	7.4
10	---	---	---	---	---	---	---	---	---	---	7.5	7.4
11	---	---	---	---	---	---	---	---	---	---	7.5	7.5
12	---	---	---	---	---	---	---	---	---	---	7.5	7.5
13	---	---	---	---	---	---	---	---	---	---	7.5	7.5
14	---	---	---	---	---	---	---	---	---	---	7.6	7.5
15	---	---	---	---	---	---	---	---	---	---	7.6	7.5
16	---	---	---	---	---	---	---	---	7.9	7.9	7.6	7.6
17	---	---	---	---	---	---	---	---	7.9	7.8	7.6	7.6
18	---	---	---	---	---	---	---	---	7.8	7.7	7.6	7.6
19	---	---	---	---	---	---	---	---	7.7	7.6	7.6	7.6
20	---	---	---	---	---	---	---	---	7.6	7.5	7.7	7.6
21	---	---	---	---	---	---	---	---	7.5	7.4	7.7	7.7
22	---	---	---	---	---	---	---	---	7.4	7.3	7.7	7.7
23	---	---	---	---	---	---	---	---	7.3	7.2	7.7	7.7
24	---	---	---	---	---	---	---	---	7.2	7.2	7.7	7.7
25	---	---	---	---	---	---	---	---	7.2	7.2	7.7	7.7
26	---	---	---	---	---	---	---	---	7.2	7.2	7.9	7.6
27	---	---	---	---	---	---	---	---	7.3	7.2	7.7	7.7
28	---	---	---	---	---	---	---	---	7.3	7.2	7.7	7.6
29	---	---	---	---	---	---	---	---	---	---	7.7	7.7
30	---	---	---	---	---	---	---	---	---	---	7.7	7.6
31	---	---	---	---	---	---	---	---	---	---	7.7	7.7
MONTH	---	---	---	---	---	---	---	---	---	---	7.9	7.3

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.7	7.7	7.7	7.7	---	---	8.2	8.1	8.0	7.8	7.8	7.6
2	7.7	7.7	7.7	7.7	---	---	8.1	8.0	8.1	7.9	7.7	7.6
3	7.7	7.6	7.7	7.7	---	---	8.1	8.0	8.1	7.8	7.6	7.3
4	7.7	7.7	7.7	7.7	---	---	8.2	8.1	8.0	7.8	7.5	7.3
5	7.7	7.7	7.7	7.7	---	---	8.1	8.1	8.0	7.8	7.6	7.4
6	7.7	7.7	7.7	7.7	---	---	8.1	8.1	8.0	7.8	7.6	7.2
7	7.7	7.7	7.7	7.7	---	---	8.1	8.0	8.0	7.8	7.9	7.1
8	7.7	7.6	7.7	7.7	---	---	8.0	7.9	8.0	7.8	7.9	6.9
9	7.7	7.7	7.7	7.7	---	---	---	---	8.0	7.9	8.0	7.3
10	7.8	7.7	7.7	7.7	---	---	---	---	8.0	7.8	7.9	7.3
11	7.8	7.7	7.7	7.7	---	---	---	---	8.1	7.8	8.0	7.0
12	7.8	7.7	7.8	7.7	---	---	---	---	8.1	7.8	7.9	7.3
13	7.8	7.7	---	---	---	---	---	---	8.1	7.8	7.6	7.3
14	7.8	7.7	---	---	---	---	---	---	8.0	7.8	7.8	6.8
15	7.8	7.7	---	---	---	---	---	---	8.0	7.9	7.3	6.9
16	7.8	7.7	---	---	8.1	8.0	---	---	8.0	7.9	7.4	7.1
17	7.7	7.7	---	---	8.2	8.1	---	---	8.1	7.9	7.3	7.1
18	7.7	7.7	---	---	8.2	8.1	---	---	8.0	7.7	7.3	7.2
19	7.8	7.7	---	---	8.1	8.1	---	---	8.0	7.8	7.8	7.2
20	7.6	7.7	---	---	8.1	8.0	---	---	8.0	7.8	7.7	6.8
21	7.8	7.7	---	---	8.1	8.0	---	---	7.9	7.7	7.7	7.3
22	7.8	7.7	---	---	8.1	8.0	---	---	7.8	7.6	7.8	7.1
23	7.8	7.7	---	---	8.1	8.0	8.1	8.0	7.8	7.4	7.7	7.0
24	7.8	7.7	---	---	8.1	8.0	8.2	7.6	7.8	7.5	7.7	7.0
25	7.8	7.7	---	---	8.3	8.0	8.0	7.7	7.9	7.6	7.6	7.2
26	7.8	7.7	---	---	8.4	7.4	8.3	7.9	7.8	7.4	7.7	6.7
27	7.8	7.7	---	---	8.6	7.5	8.0	7.7	7.7	7.5	7.9	6.6
28	7.7	7.6	---	---	8.7	8.1	8.0	7.9	7.7	7.6	8.0	7.0
29	7.7	7.6	---	---	8.3	8.1	8.0	7.6	7.8	7.5	7.6	6.8
30	7.7	7.7	---	---	8.2	8.0	8.0	7.8	7.8	7.5	7.3	6.7
31	---	---	---	---	---	---	8.0	7.8	7.8	7.5	---	---
MONTH	7.8	7.6	---	---	---	---	---	---	8.1	7.4	8.0	6.6

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.4	4.5	7.5	5.9	---	---	---	---	13.2	11.7	9.6	9.4
2	5.3	4.5	7.1	6.1	---	---	---	---	13.0	11.8	9.4	9.1
3	5.4	4.7	8.1	5.9	---	---	---	---	11.8	11.1	9.7	9.3
4	5.7	4.9	8.3	7.7	---	---	---	---	---	---	10.0	9.7
5	6.3	5.4	9.0	7.5	---	---	---	---	---	---	10.0	9.7
6	6.3	5.6	8.0	7.5	---	---	---	---	---	---	9.8	9.3
7	6.2	5.5	8.4	7.6	---	---	---	---	---	---	10.0	9.4
8	6.4	5.8	8.4	7.6	---	---	---	---	---	---	10.2	9.5
9	6.7	5.7	8.1	7.5	---	---	---	---	---	---	10.4	9.9
10	6.3	5.3	7.6	7.1	---	---	---	---	---	---	10.1	9.7
11	6.5	5.6	7.3	6.7	---	---	---	---	---	---	10.1	9.9
12	6.5	5.5	7.5	6.7	---	---	---	---	---	---	---	---
13	5.6	5.3	7.6	6.8	---	---	---	---	---	---	---	---
14	6.0	5.2	7.5	7.0	---	---	---	---	---	---	---	---
15	6.2	5.3	8.1	7.2	---	---	---	---	---	---	8.7	7.8
16	6.6	6.0	8.6	7.9	---	---	---	---	11.5	10.6	8.8	8.2
17	7.2	6.3	8.7	8.1	---	---	---	---	11.9	10.3	9.4	8.8
18	7.2	6.5	8.7	8.0	---	---	---	---	11.9	11.3	9.5	9.1
19	7.4	6.5	8.4	8.2	---	---	---	---	11.3	10.4	9.3	8.9
20	7.0	6.5	---	---	---	---	14.0	12.3	10.4	10.0	9.7	9.1
21	6.5	6.1	---	---	---	---	12.3	11.6	10.0	9.5	10.1	9.5
22	7.1	6.4	---	---	---	---	12.4	11.3	10.6	9.3	9.9	9.3
23	6.8	6.3	---	---	---	---	12.4	11.0	10.3	9.7	10.4	9.8
24	6.5	5.8	---	---	---	---	12.0	10.9	9.8	9.5	10.7	10.0
25	6.4	5.7	---	---	---	---	12.6	10.9	9.7	9.4	10.8	10.1
26	6.3	5.6	---	---	---	---	12.6	10.8	9.4	9.1	11.4	9.9
27	6.5	5.3	---	---	---	---	14.5	11.6	9.5	9.2	10.0	8.9
28	5.9	5.2	---	---	---	---	12.8	11.6	9.6	9.2	10.0	8.5
29	5.2	4.7	---	---	---	---	11.9	11.0	---	---	9.9	8.3
30	5.9	4.6	---	---	---	---	12.1	10.6	---	---	11.0	8.6
31	6.5	5.9	---	---	---	---	12.7	11.1	---	---	11.3	8.8
MONTH	7.4	4.5	---	---	---	---	---	---	---	---	11.4	7.8

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.7	8.2	8.4	6.5	5.1	4.5	---	---	6.3	4.8	5.6	2.9
2	10.5	7.9	7.2	5.5	6.1	4.6	5.9	3.2	6.5	4.4	3.5	2.1
3	12.2	9.0	5.9	5.2	5.7	2.3	5.9	5.6	5.8	4.1	3.2	1.9
4	12.8	8.9	6.7	5.4	5.5	2.7	6.1	5.5	4.8	4.0	3.3	1.7
5	12.4	8.8	5.4	4.5	5.1	2.3	7.3	6.1	5.9	4.1	4.7	2.8
6	13.9	9.0	5.0	3.2	5.5	2.6	7.4	6.5	6.3	4.4	4.2	2.4
7	14.2	9.2	5.7	3.7	4.9	2.9	7.8	6.7	6.2	5.2	3.6	2.3
8	14.9	7.5	5.7	5.1	3.1	2.4	6.9	5.4	6.6	5.2	3.5	2.7
9	10.8	3.9	5.1	4.6	2.9	2.2	6.2	5.7	7.0	5.2	---	---
10	11.5	2.7	4.7	4.1	3.2	2.2	6.4	5.6	6.9	5.4	---	---
11	12.6	3.2	4.4	4.1	3.2	2.4	6.1	5.6	7.5	5.2	---	---
12	12.2	2.7	4.8	4.3	3.1	2.1	---	---	7.0	5.2	---	---
13	11.6	2.4	5.2	4.8	---	---	---	---	7.2	5.4	---	---
14	8.7	1.1	5.4	4.7	---	---	6.6	5.1	7.7	5.5	---	---
15	10.8	2.3	4.9	4.3	---	---	6.1	5.0	7.4	5.8	---	---
16	11.3	2.4	4.5	4.0	5.3	3.5	6.4	4.8	8.7	6.2	---	---
17	---	---	4.2	3.3	3.8	2.7	7.0	4.3	8.5	5.7	---	---
18	---	---	3.8	3.2	3.4	2.6	6.3	4.7	7.9	4.7	---	---
19	---	---	3.8	3.3	3.1	2.0	7.0	4.9	7.5	4.0	---	---
20	---	---	4.0	3.3	4.7	1.7	7.6	5.2	5.9	3.2	---	---
21	---	---	4.4	3.6	4.5	3.1	8.3	4.9	5.2	2.0	---	---
22	---	---	4.9	4.0	3.5	2.7	9.1	6.0	3.2	1.9	---	---
23	---	---	5.3	4.5	2.9	1.6	9.5	4.8	4.4	1.8	---	---
24	---	---	5.1	4.7	---	---	7.6	3.4	5.5	2.4	---	---
25	---	---	5.1	3.3	---	---	5.4	3.9	4.5	2.6	---	---
26	---	---	5.5	5.1	---	---	7.1	5.0	3.4	1.7	---	---
27	---	---	5.4	5.1	---	---	6.8	5.8	3.7	1.7	---	---
28	---	---	5.4	5.1	---	---	7.4	5.3	4.6	1.9	---	---
29	7.5	6.9	5.4	5.1	---	---	5.6	3.3	5.1	2.7	---	---
30	8.8	6.0	5.3	4.9	---	---	5.1	4.3	5.8	3.0	---	---
31	---	---	5.1	4.6	---	---	6.0	4.3	7.2	3.5	---	---
MONTH	---	---	8.4	3.2	---	---	9.5	3.2	8.7	1.7	---	---

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	14.0	14.5	12.0	---	---	---	---	---	---	---	---
2	18.5	14.0	13.0	11.0	---	---	---	---	---	---	---	---
3	17.5	15.0	11.0	10.5	---	---	---	---	---	---	---	---
4	16.5	12.5	10.5	9.5	---	---	---	---	---	---	---	---
5	17.0	12.0	11.0	9.0	---	---	---	---	---	---	---	---
6	18.0	13.0	12.0	9.5	---	---	---	---	---	---	---	---
7	17.5	14.5	12.5	9.5	---	---	---	---	---	---	---	---
8	19.0	16.0	12.5	9.5	---	---	---	---	---	---	---	---
9	20.5	17.5	12.5	10.0	---	---	---	---	---	---	---	---
10	19.5	16.0	13.0	12.0	---	---	---	---	---	---	---	---
11	17.5	15.0	13.5	12.0	---	---	---	---	---	---	---	---
12	17.0	15.0	13.0	12.0	---	---	---	---	---	---	---	---
13	19.5	16.5	13.0	12.0	---	---	---	---	---	---	---	---
14	19.0	18.0	12.0	8.0	---	---	---	---	---	---	---	---
15	18.0	14.5	8.0	6.0	---	---	---	---	---	---	---	---
16	14.5	11.5	7.0	5.5	---	---	---	---	---	---	---	---
17	13.0	9.5	6.5	4.5	---	---	---	---	---	---	---	---
18	13.5	9.0	7.5	5.5	---	---	---	---	---	---	---	---
19	13.5	9.0	7.0	6.5	---	---	---	---	---	---	---	---
20	12.5	12.0	---	---	---	---	---	---	---	---	---	---
21	14.5	12.5	---	---	---	---	---	---	---	---	---	---
22	16.5	14.0	---	---	---	---	---	---	---	---	---	---
23	16.0	12.5	---	---	---	---	---	---	---	---	---	---
24	15.5	13.5	---	---	---	---	---	---	---	---	---	---
25	18.0	14.5	---	---	---	---	---	---	---	---	---	---
26	17.5	15.0	---	---	---	---	---	---	---	---	8.0	8.0
27	18.5	15.0	---	---	---	---	---	---	---	---	8.5	8.0
28	17.0	16.0	---	---	---	---	---	---	---	---	8.5	8.5
29	16.0	14.5	---	---	---	---	---	---	---	---	8.5	8.5
30	15.5	12.0	---	---	---	---	---	---	---	---	9.0	8.5
31	15.0	13.0	---	---	---	---	---	---	---	---	9.0	8.5
MONTH	20.5	9.0	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	9.0	16.0	9.5	25.5	19.0	26.0	21.5	22.5	17.5	25.0	20.5
2	9.0	9.0	15.5	12.5	23.0	22.0	26.0	22.0	23.0	19.0	23.0	22.0
3	9.5	9.0	15.0	11.0	25.0	20.0	26.0	23.0	22.0	20.5	22.0	21.5
4	9.5	9.5	14.5	9.5	26.5	21.0	25.0	23.0	20.0	19.5	24.5	21.0
5	9.5	9.5	13.0	10.5	27.0	21.5	27.5	22.5	21.5	18.0	26.0	21.0
6	9.5	9.5	16.5	13.0	28.0	17.5	28.0	23.5	23.0	18.0	24.0	22.0
7	10.0	9.5	16.0	14.0	22.0	17.5	28.0	25.0	23.5	18.0	25.0	21.5
8	13.0	10.0	16.5	13.0	24.0	20.0	26.0	24.0	24.0	19.0	26.0	21.5
9	14.0	9.0	17.5	14.0	21.5	18.5	25.0	21.5	24.5	20.0	26.0	22.0
10	14.5	8.5	21.5	15.0	22.5	17.0	26.0	22.0	25.0	21.5	26.0	22.0
11	15.5	8.5	18.5	17.0	23.5	18.5	25.5	22.5	25.5	22.0	23.5	21.0
12	17.5	10.5	17.0	15.0	23.0	20.5	---	---	24.5	19.5	21.0	19.5
13	18.0	13.5	17.5	13.0	24.5	22.5	---	---	24.5	19.0	20.0	18.5
14	15.0	10.5	21.5	13.5	24.5	24.0	25.0	23.0	24.5	19.0	22.5	17.0
15	15.5	9.5	23.0	17.5	24.0	21.5	25.0	20.0	22.5	20.5	23.0	19.0
16	16.5	10.0	23.0	19.5	24.5	22.5	25.0	20.0	24.5	19.5	21.0	19.0
17	18.0	13.0	25.5	18.0	25.0	19.5	25.5	21.0	24.0	19.0	21.0	19.0
18	18.5	14.0	26.0	19.5	25.5	20.5	23.5	21.5	24.5	19.0	20.0	18.0
19	19.0	13.5	25.5	20.0	24.0	21.5	23.5	20.0	25.0	20.5	20.0	19.0
20	21.0	14.0	23.0	18.5	26.5	20.5	23.5	19.0	25.0	22.0	19.5	18.5
21	18.0	14.0	22.5	18.0	24.5	21.5	24.0	18.5	25.5	22.5	18.5	15.5
22	16.5	11.5	20.5	16.0	26.0	20.5	24.5	19.0	24.0	22.5	19.0	14.5
23	16.5	11.0	19.5	14.0	27.0	22.0	24.5	20.0	25.0	21.5	19.0	16.0
24	16.5	11.0	20.5	16.5	26.0	23.0	22.5	21.0	24.5	19.0	18.5	15.0
25	17.5	10.5	21.0	16.0	26.0	21.0	24.0	21.0	22.0	20.0	16.0	14.0
26	18.0	12.0	20.5	17.0	34.5	24.0	24.5	22.0	24.5	20.5	18.5	15.0
27	15.0	12.0	21.0	19.0	32.0	26.0	23.5	20.0	23.0	20.5	20.5	17.0
28	16.5	12.0	22.0	18.0	28.5	25.0	23.0	18.5	22.5	19.0	23.5	18.5
29	14.5	12.0	22.0	19.5	27.0	24.5	23.5	19.5	24.0	18.5	25.0	20.5
30	15.5	10.0	24.0	17.5	26.5	23.0	21.5	19.0	24.5	19.0	25.0	21.0
31	---	---	25.0	18.0	---	---	22.0	17.5	25.0	20.0	---	---
MONTH	21.0	8.5	26.0	9.5	34.5	17.0	28.0	17.5	25.5	17.5	26.0	14.0

no tape

03242300 CAESAR CREEK AT HARVEYSBURG, OHIO

LOCATION.--Lat 39°30'27", long 84°00'42", Warren County, at gaging station on right bank at downstream side of bridge on State Highway 73, 0.2 mile north of Harveysburg, 2.3 miles downstream from Turkey Run, and 3.1 miles upstream from Jonahs Run.

DRAINAGE AREA.--209 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1966-67, 1969, July to September 1970 (partial-record station); November 1970 to September 1971.
Water temperatures: December 1970 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 723 micromhos Dec. 30; minimum, 171 micromhos June 26.
Water temperatures: Maximum, 30.5°C June 6; minimum, freezing point Dec. 26 to Jan. 3, Jan. 6-13, 16-19, Feb. 4-18, Mar. 9.

Period of record:
Specific conductance (December 1970 to September 1971): Maximum, 723 micromhos Dec. 30, 1970; minimum, 171 micromhos June 26, 1971.
Water temperatures: Maximum, 30.5°C June 6, 1971; minimum, freezing point Dec. 26, 1970 to Jan. 3, 1971, Jan. 6-13, 16-19, Feb. 4-18, Mar. 9, 1971.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since December 1970. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected on an approximate monthly basis to further define the quality of water.

CHEMICAL ANALYSES, NOVEMBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
NOV. 10...	1345	11	4.7	120	120	27	32	76	35	13	3.4	316
DEC. 28...	1200	98	10	70	160	55	63	88	38	8.9	1.7	324
FEB. 16...	1430	108	6.4	90	150	76	90	68	26	9.1	2.9	244
MAR. 18...	1145	270	9.6	80	170	72	72	84	31	7.2	1.3	268
APR. 30...	1100	34	2.5	60	140	73	73	73	32	8.7	1.6	296
JUNE 10...	1200	44	7.6	60	590	71	98	80	28	9.0	2.6	285
JULY 21...	1130	19	4.9	50	270	20	40	73	32	9.0	2.1	292
SEP. 02...	1215	9.7	3.6	80	220	58	100	58	34	13	2.8	256

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)
NOV. 10...	0	60	26	.3	2.0	371	330	74	656	7.8	11.5	10
DEC. 28...	0	63	26	.2	27	435	380	110	710	8.1	.5	5
FEB. 16...	0	48	28	.5	13	347	280	76	567	7.9	1.0	10
MAR. 18...	0	49	30	.2	40	382	340	120	627	7.9	3.5	5
APR. 30...	0	60	22	.2	7.3	363	310	67	614	8.1	12.0	5
JUNE 10...	0	48	22	.4	42	377	310	76	617	8.1	20.0	7
JULY 21...	0	52	22	.3	15	363	310	70	595	7.9	22.0	5
SEP. 02...	0	59	28	.3	1.6	333	280	70	572	7.6	22.5	6

03242300 CAESAR CREEK AT HARVEYSBURG, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), DECEMBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	714	704	---	---	586	574
2	---	---	---	---	---	---	714	694	---	---	588	581
3	---	---	---	---	---	---	710	681	---	---	585	583
4	---	---	---	---	---	---	681	428	---	---	601	585
5	---	---	---	---	---	---	582	499	---	---	610	586
6	---	---	---	---	---	---	658	582	451	242	607	431
7	---	---	---	---	---	---	682	642	539	451	528	425
8	---	---	---	---	---	---	704	678	583	539	575	528
9	---	---	---	---	---	---	712	704	625	583	595	564
10	---	---	---	---	---	---	710	688	650	625	589	560
11	---	---	---	---	---	---	698	672	680	650	592	555
12	---	---	---	---	---	---	672	660	651	372	590	559
13	---	---	---	---	---	---	660	598	388	351	560	536
14	---	---	---	---	---	---	603	546	466	388	594	560
15	---	---	---	---	---	---	584	555	533	466	596	484
16	---	---	---	---	---	---	637	584	570	533	571	513
17	---	---	---	---	---	---	659	637	595	203	610	571
18	---	---	---	---	---	---	693	645	287	205	625	619
19	---	---	---	---	---	---	712	693	347	287	626	622
20	---	---	---	---	---	---	---	---	402	312	628	623
21	---	---	---	---	---	---	---	---	500	402	636	628
22	---	---	---	---	520	426	---	---	481	215	639	633
23	---	---	---	---	562	520	---	---	382	270	635	632
24	---	---	---	---	645	562	---	---	493	382	638	633
25	---	---	---	---	670	645	---	---	534	493	641	638
26	---	---	---	---	696	670	---	---	542	529	640	633
27	---	---	---	---	702	696	---	---	553	524	635	629
28	---	---	---	---	712	702	---	---	574	553	634	621
29	---	---	---	---	716	686	---	---	---	---	626	612
30	---	---	---	---	723	710	---	---	---	---	615	601
31	---	---	---	---	716	702	---	---	---	---	614	604
MONTH	---	---	---	---	---	---	---	---	680	203	641	425

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	617	603	591	576	---	---	628	623	573	564	---	---
2	612	597	586	581	---	---	678	603	587	573	---	---
3	612	595	584	576	618	612	625	605	581	553	---	---
4	612	592	580	565	623	616	---	---	562	490	---	---
5	609	591	581	572	623	616	---	---	586	506	---	---
6	606	592	583	223	623	612	---	---	594	583	---	---
7	602	591	528	306	614	234	---	---	584	581	---	---
8	599	592	494	332	509	398	---	---	595	583	---	---
9	600	593	559	499	585	505	---	---	603	594	---	---
10	613	599	600	562	623	585	---	---	600	576	---	---
11	615	607	605	600	636	623	---	---	592	567	---	---
12	621	611	601	573	643	636	---	---	578	561	---	---
13	632	618	619	585	647	641	---	---	575	555	603	570
14	632	623	625	619	643	641	628	623	569	547	570	536
15	638	627	621	616	641	581	630	618	561	548	594	558
16	638	631	616	591	630	576	627	608	566	502	616	594
17	638	631	592	572	643	625	621	598	---	---	636	616
18	642	634	581	553	649	632	605	597	---	---	649	636
19	642	636	576	556	638	627	598	586	---	---	647	639
20	643	631	576	558	632	605	601	580	---	---	647	586
21	642	633	581	564	605	595	594	570	---	---	607	555
22	645	636	587	472	607	595	583	564	---	---	584	518
23	637	623	581	438	595	570	576	559	---	---	608	547
24	631	613	556	425	591	562	562	411	---	---	638	608
25	625	603	589	556	578	558	443	387	---	---	645	638
26	617	605	580	562	564	171	48[illegible]	440	---	---	639	634
27	619	603	592	578	449	274	453	418	---	---	639	632
28	616	605	591	448	566	452	559	431	---	---	645	634
29	615	580	469	412	616	565	564	548	---	---	647	638
30	592	580	416	293	630	619	550	545	---	---	---	---
31	---	---	---	---	---	---	569	550	---	---	---	---
MONTH	645	580	625	223	649	171	---	---	---	---	---	---
YEAR	723	171										

03242300 CAESAR CREEK AT HARVEYSBURG, OHIO--Continued

TEMPERATURE (°C) OF WATER, DECEMBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	0.5	0.0	---	---	7.0	4.5
2	---	---	---	---	---	---	1.5	0.0	---	---	6.5	5.5
3	---	---	---	---	---	---	2.5	0.0	---	---	5.5	2.0
4	---	---	---	---	---	---	3.5	1.5	0.0	0.0	3.0	0.5
5	---	---	---	---	---	---	3.5	0.5	0.0	0.0	4.0	1.5
6	---	---	---	---	---	---	0.5	0.0	0.0	0.0	5.0	4.0
7	---	---	---	---	---	---	0.0	0.0	0.5	0.0	5.0	2.0
8	---	---	---	---	---	---	1.0	0.0	0.5	0.0	2.0	0.5
9	---	---	---	---	---	---	0.0	0.0	0.0	0.0	3.5	0.0
10	---	---	---	---	---	---	0.5	0.0	0.0	0.0	3.5	2.5
11	---	---	---	---	---	---	0.5	0.0	0.0	0.0	4.5	2.5
12	---	---	---	---	---	---	0.5	0.0	0.0	0.0	7.5	3.0
13	---	---	---	---	---	---	0.5	0.0	0.0	0.0	7.5	6.5
14	---	---	---	---	---	---	2.0	0.5	0.0	0.0	10.5	6.0
15	---	---	---	---	---	---	2.0	1.0	0.0	0.0	11.0	8.5
16	---	---	---	---	---	---	1.0	0.0	1.0	0.0	8.5	5.0
17	---	---	---	---	---	---	0.5	0.0	0.5	0.0	5.0	3.5
18	---	---	---	---	---	---	0.0	0.0	1.0	0.0	4.5	3.5
19	---	---	---	---	---	---	0.0	0.0	3.0	0.5	4.5	3.0
20	---	---	---	---	---	---	---	---	4.0	3.0	3.0	2.0
21	---	---	---	---	---	---	---	---	4.0	3.5	5.5	1.0
22	---	---	---	---	6.0	5.0	---	---	5.5	1.5	5.0	4.0
23	---	---	---	---	7.0	6.0	---	---	5.5	2.5	4.0	2.0
24	---	---	---	---	6.0	2.0	---	---	2.5	2.0	3.5	1.0
25	---	---	---	---	2.0	0.5	---	---	4.5	1.5	4.5	1.5
26	---	---	---	---	0.5	0.0	---	---	6.5	4.5	7.0	3.0
27	---	---	---	---	0.5	0.0	---	---	7.0	6.0	7.0	4.0
28	---	---	---	---	0.5	0.0	---	---	6.0	4.5	9.5	6.0
29	---	---	---	---	0.5	0.0	---	---	---	---	9.0	7.0
30	---	---	---	---	0.5	0.0	---	---	---	---	8.5	4.5
31	---	---	---	---	0.5	0.0	---	---	---	---	11.0	6.0
MONTH	---	---	---	---	---	---	---	---	7.0	0.0	11.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.0	19.0	9.5	---	---	26.0	24.5	24.0	20.0	---	---
2	9.0	7.0	14.5	11.5	---	---	25.5	23.5	24.5	22.0	---	---
3	10.0	5.5	14.5	11.0	25.0	24.0	24.0	22.0	24.0	23.0	---	---
4	11.0	6.5	14.5	10.0	27.5	22.0	---	---	23.0	22.0	---	---
5	9.0	7.0	13.0	10.5	28.5	23.0	---	---	22.5	21.5	---	---
6	8.0	5.5	14.5	12.5	30.5	24.0	---	---	24.0	20.5	---	---
7	10.5	5.5	14.5	13.0	26.0	19.0	---	---	24.5	21.0	---	---
8	13.0	7.0	14.5	12.0	24.5	21.5	---	---	25.5	21.5	---	---
9	13.5	10.0	15.0	12.5	23.0	21.0	---	---	25.5	22.0	---	---
10	14.5	9.5	17.5	13.5	24.0	19.0	---	---	26.0	24.0	---	---
11	16.5	9.0	17.0	15.5	25.0	20.0	---	---	27.5	24.0	---	---
12	16.5	11.0	15.5	14.0	23.5	22.0	---	---	26.5	22.5	---	---
13	18.5	14.0	14.5	12.0	27.5	21.5	---	---	27.0	22.0	21.5	20.5
14	15.5	12.0	17.0	12.5	25.0	22.5	26.0	24.5	27.0	22.0	22.5	18.5
15	16.5	10.5	19.0	15.5	24.5	21.5	26.0	22.5	24.5	23.0	24.0	20.5
16	17.0	11.0	22.0	16.5	---	---	26.0	23.0	27.0	22.0	22.5	20.5
17	18.0	13.5	24.0	18.0	---	---	26.5	23.5	27.0	21.0	22.0	20.5
18	20.5	14.0	26.0	20.0	26.0	22.0	25.5	23.5	24.5	20.5	21.5	20.0
19	21.5	13.5	27.0	20.5	25.0	24.0	25.5	22.5	25.0	20.5	21.0	20.0
20	25.5	13.5	26.0	19.5	27.5	22.5	25.0	22.0	25.5	22.5	20.5	19.0
21	17.5	14.5	26.5	17.0	26.0	24.5	25.0	21.5	27.0	23.0	19.0	17.0
22	18.0	12.0	26.5	14.5	27.0	23.0	26.0	22.0	25.0	23.5	18.5	16.0
23	17.0	11.5	26.5	12.0	27.5	22.5	26.0	22.5	26.5	22.5	19.0	17.0
24	17.5	11.0	26.5	17.0	29.0	23.5	24.5	22.5	25.5	20.0	19.0	16.5
25	20.5	10.5	19.0	16.5	27.0	24.5	24.0	22.5	23.5	21.5	17.5	15.5
26	20.0	11.5	20.0	14.5	25.5	20.0	25.0	23.5	---	---	18.5	16.5
27	16.5	11.0	16.5	12.0	26.0	24.0	24.0	22.5	---	---	20.5	17.5
28	19.5	12.0	19.5	10.0	26.5	25.0	24.5	21.0	---	---	23.0	19.5
29	14.5	12.0	23.0	12.5	25.5	23.5	25.0	22.0	---	---	22.5	21.5
30	17.5	9.5	25.5	12.0	26.0	24.0	23.5	22.0	---	---	---	---
31	---	---	---	---	---	---	24.0	20.5	---	---	---	---
MONTH	25.5	5.5	27.0	9.5	30.5	19.0	---	---	27.5	20.0	---	---
YEAR	30.5	0.0										

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03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO

LOCATION.--Lat 39°12'38", long 84°17'33", Hamilton County, on right bank at upstream side of bridge on State Highway 126, 0.4 mile southeast of Miamiville, 4.2 miles upstream from gaging station at Milford, 5.6 miles upstream from East Fork Little Miami River, and 1.0 mile north of Camp Dennison.

DRAINAGE AREA.--1,189 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1971.
Water temperatures: November 1970 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 930 micromhos June 2; minimum, 158 micromhos Sept. 12.
Dissolved oxygen: Maximum, 15.0 mg/l Jan. 6-19, Mar. 25, Apr. 2, 7; minimum, 0.8 mg/l May 17.
Water temperatures: Maximum, 29.5°C June 26, July 9; minimum, freezing point Dec. 26 to Jan. 3, Jan. 6-13, 16-26, Feb. 17.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.							
01...	1730	--	--	--	--	--	--
NOV.							
13...	1115	164	332	0	64	51	.4
20...	1310	968	212	10	52	34	.4
DEC.							
09...	1115	178	280	22	72	50	.6
23...	1100	3600	152	0	56	28	.3
JAN.							
15...	1415	1750	167	0	48	21	.4
24...	1930	380	287	22	75	39	.3
FEB.							
04...	1050	950	337	0	74	200	.3
19...	1130	4410	105	0	26	19	.2
MAR.							
12...	1130	4000	177	0	48	39	.2
31...	1100	613	280	14	67	35	.3
APR.							
09...	1800	497	222	0	62	39	.2
23...	1105	328	330	0	59	42	.3
MAY							
03...	1115	337	308	0	63	45	.1
07...	1315	2710	268	39	42	23	.3
JUNE							
03...	1345	--	--	--	--	--	--
09...	1335	491	148	0	27	14	.3
18...	1115	203	302	15	56	41	.3
JULY							
23...	1130	161	332	0	59	47	.2
28...	1400	338	200	0	42	33	.2
AUG.							
06...	1100	386	242	0	44	39	.2
20...	1100	103	296	22	62	52	.2
SEP.							
03...	1100	519	162	4	37	26	.3
20...	0815	160	300	0	50	40	.3

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance: Maximum, 930 micromhos June 2, 1971; minimum, 158 micromhos Sept. 12, 1971.
Dissolved oxygen: Maximum, 15.0 mg/l Jan. 6-19, Mar. 25, Apr. 2, 7, 1971; minimum, 0.8 mg/l May 17, 1971.
Water temperatures: Maximum, 29.5°C June 26, July 9, 1971; minimum, freezing point Dec. 26, 1970 to Jan. 3, 1971, Jan. 6-13, 16-26, Feb. 17, 1971.

REMARKS.--Continuous water-quality recorder operated since November 1970. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater due to instrument limitation. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for 03245500 Little Miami River at Milford, Ohio (drainage area 1,203 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
01...	--	--	--	--	--	12	1.1
NOV.							
13...	10	446	340	68	761	--	--
20...	6.7	322	240	50	552	--	--
DEC.							
09...	11	466	330	64	737	--	--
23...	15	272	180	56	406	--	--
JAN.							
15...	10	288	190	53	432	--	--
24...	14	486	360	88	747	--	--
FEB.							
04...	8.2	760	370	94	1250	--	--
19...	12	204	120	34	307	--	--
MAR.							
12...	14	314	210	65	517	--	--
31...	13	400	330	76	695	--	--
APR.							
09...	7.4	352	260	78	655	--	--
23...	6.1	412	350	79	717	--	--
MAY							
03...	7.2	409	320	67	689	--	--
07...	9.2	273	360	75	460	--	--
JUNE							
03...	--	--	--	--	--	110	.8
09...	10	208	160	39	343	--	--
18...	11	452	350	72	722	--	--
JULY							
23...	6.5	462	340	68	729	--	--
28...	6.8	302	210	46	494	--	--
AUG.							
06...	8.0	362	250	52	559	--	--
20...	7.4	458	350	76	762	--	--
SEP.							
03...	7.1	246	180	40	424	--	--
20...	11	388	310	64	669	--	--

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), NOVEMBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	748	706	762	628	---	---	---	---
2	---	---	---	---	732	695	676	649	---	---	---	---
3	---	---	---	---	714	685	727	667	---	---	---	---
4	---	---	---	---	711	671	705	355	---	---	---	---
5	---	---	---	---	712	678	441	361	---	---	---	---
6	---	---	---	---	721	657	537	433	---	---	---	---
7	---	---	---	---	735	720	610	520	---	---	---	---
8	---	---	---	---	747	730	657	610	---	---	---	---
9	---	---	---	---	776	747	699	656	---	---	---	---
10	---	---	---	---	792	770	703	666	---	---	---	---
11	---	---	---	---	793	761	714	669	---	---	---	---
12	---	---	759	739	761	602	709	675	---	---	---	---
13	---	---	779	759	693	631	679	618	---	---	---	---
14	---	---	781	723	631	598	643	456	---	---	---	---
15	---	---	752	715	690	631	477	384	---	---	---	---
16	---	---	747	603	666	478	555	382	---	---	512	480
17	---	---	603	564	499	414	612	514	---	---	568	512
18	---	---	695	584	523	492	661	600	---	---	594	566
19	---	---	714	668	604	519	682	652	---	---	611	594
20	---	---	668	508	636	598	720	660	---	---	621	596
21	---	---	531	507	652	616	733	667	---	---	641	575
22	---	---	580	511	625	355	741	714	---	---	639	596
23	---	---	617	580	448	363	766	738	---	---	651	551
24	---	---	620	617	516	424	757	733	---	---	659	627
25	---	---	619	600	595	516	756	732	---	---	678	609
26	---	---	599	586	613	554	740	696	---	---	681	632
27	---	---	606	591	664	613	---	---	---	---	689	647
28	---	---	650	606	679	662	---	---	---	---	704	632
29	---	---	678	650	697	658	---	---	---	---	710	652
30	---	---	730	676	712	672	---	---	---	---	690	657
31	---	---	---	---	765	619	---	---	---	---	674	654
MONTH	---	---	---	---	793	355	766	355	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	674	650	773	675	916	684	617	573	630	603	576	555
2	758	654	738	696	930	689	645	616	647	621	587	264
3	---	---	735	615	711	699	671	645	651	584	416	210
4	---	---	687	627	725	711	677	650	614	578	417	320
5	666	624	725	665	726	717	665	650	698	614	452	408
6	633	600	719	332	719	702	662	653	689	416	500	294
7	660	628	434	333	744	683	663	638	588	414	552	435
8	690	613	402	347	627	311	662	650	662	588	539	476
9	661	621	545	402	381	312	669	645	665	645	476	428
10	690	636	602	544	495	381	651	561	657	632	492	468
11	675	634	645	602	584	495	699	572	657	632	540	426
12	730	630	674	645	639	587	572	440	672	650	506	158
13	697	670	677	663	680	639	540	453	---	---	473	438
14	730	698	672	666	705	680	555	539	---	---	513	473
15	730	682	689	672	728	705	581	555	---	---	546	513
16	750	682	696	688	746	728	608	581	---	---	546	533
17	---	693	698	297	750	725	648	608	683	656	588	546
18	774	715	566	348	737	725	681	648	713	681	633	588
19	724	667	612	566	744	732	689	663	728	692	660	633
20	745	694	644	612	732	675	702	689	731	698	668	393
21	738	700	656	641	705	680	707	687	723	671	602	495
22	739	733	668	656	708	669	707	671	714	642	617	582
23	759	699	681	668	704	683	702	656	717	681	582	525
24	772	661	696	681	717	690	686	617	737	699	543	510
25	763	695	686	550	707	657	705	635	740	654	563	527
26	732	682	723	648	684	287	705	674	708	506	561	198
27	---	---	764	654	287	237	674	483	744	708	581	353
28	---	---	756	654	383	286	499	459	767	741	602	555
29	---	---	836	606	492	382	536	480	738	633	642	555
30	741	683	896	627	573	492	587	536	642	597	655	642
31	---	---	893	675	---	---	603	585	597	554	---	---
MONTH	774	600	896	297	930	237	707	440	767	414	668	158
YEAR	930	158										

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO--Continued

PH (UNITS), NOVEMBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	7.8	7.7	7.3	7.2	---	---	---	---
2	---	---	---	---	7.9	7.7	7.3	7.2	---	---	---	---
3	---	---	---	---	8.0	7.9	7.3	7.2	---	---	---	---
4	---	---	---	---	8.0	7.9	7.3	7.0	---	---	---	---
5	---	---	---	---	8.0	7.9	7.1	7.0	---	---	---	---
6	---	---	---	---	8.0	8.0	7.2	7.1	---	---	---	---
7	---	---	---	---	8.0	8.0	7.3	7.2	---	---	---	---
8	---	---	---	---	8.1	7.9	7.3	7.2	---	---	---	---
9	---	---	---	---	8.1	8.0	7.4	7.3	---	---	---	---
10	---	---	---	---	8.2	8.1	7.5	7.1	---	---	---	---
11	---	---	---	---	8.2	8.0	7.5	7.2	---	---	---	---
12	---	---	7.7	7.6	8.1	7.8	7.3	7.2	---	---	---	---
13	---	---	7.6	7.6	8.0	7.9	7.3	7.2	---	---	---	---
14	---	---	7.7	7.6	8.0	7.8	7.2	7.2	---	---	---	---
15	---	---	7.7	7.6	7.9	7.8	7.2	7.1	---	---	---	---
16	---	---	7.7	7.6	8.0	7.8	7.3	7.2	---	---	8.2	8.1
17	---	---	7.8	7.6	7.8	7.7	7.4	7.2	---	---	8.4	8.1
18	---	---	7.8	7.7	7.8	7.7	7.5	7.2	---	---	8.4	8.1
19	---	---	7.9	7.8	7.8	7.7	7.5	7.4	---	---	8.8	8.3
20	---	---	7.9	7.7	7.8	7.8	7.8	7.3	---	---	8.5	8.2
21	---	---	7.7	7.6	7.9	7.6	8.1	7.2	---	---	---	---
22	---	---	7.8	7.7	7.7	7.3	7.9	7.2	---	---	---	---
23	---	---	7.8	7.7	7.4	7.1	7.4	7.2	---	---	---	---
24	---	---	7.8	7.7	7.4	7.4	7.4	7.2	---	---	---	---
25	---	---	7.8	7.7	7.4	7.4	7.4	7.0	---	---	---	---
26	---	---	7.8	7.6	7.4	7.3	8.0	7.3	---	---	---	---
27	---	---	7.7	7.5	7.3	7.2	---	---	---	---	---	---
28	---	---	7.7	7.6	7.3	7.2	---	---	---	---	---	---
29	---	---	7.7	7.6	7.3	7.2	---	---	---	---	---	---
30	---	---	7.7	7.6	7.3	7.2	---	---	---	---	---	---
31	---	---	---	---	7.3	7.2	---	---	---	---	---	---
MONTH	---	---	---	---	8.2	7.1	8.1	7.0	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.8	8.8	---	---	8.4	7.5	---	---	8.6	8.1
2	---	---	9.0	8.7	---	---	7.7	7.4	---	---	8.5	7.9
3	---	---	8.8	8.7	8.4	8.1	7.8	7.4	---	---	8.0	7.7
4	---	---	8.8	8.7	8.1	7.2	7.9	7.5	---	---	8.0	7.7
5	---	---	9.0	8.4	8.2	8.0	7.9	7.1	---	---	8.0	7.9
6	---	---	9.0	8.1	8.4	8.1	---	---	---	---	8.4	7.9
7	---	---	8.7	8.1	8.3	7.7	---	---	---	---	8.4	7.5
8	---	---	8.7	7.9	7.7	7.2	---	---	---	---	8.0	7.5
9	---	---	---	---	7.5	7.2	---	---	---	---	7.9	7.8
10	---	---	---	---	7.5	7.3	---	---	---	---	8.0	7.9
11	---	---	---	---	7.6	7.4	---	---	---	---	8.2	8.0
12	---	---	---	---	7.6	7.5	---	---	---	---	8.2	7.9
13	---	---	---	---	7.8	7.5	---	---	---	---	8.1	8.0
14	---	---	---	---	7.7	7.4	---	---	---	---	8.1	8.0
15	---	---	---	---	7.8	7.6	---	---	---	---	8.1	8.1
16	---	---	---	---	7.8	7.0	---	---	---	---	8.1	8.1
17	---	---	---	---	7.9	7.6	---	---	9.0	8.8	8.1	7.7
18	---	---	---	---	7.8	7.7	---	---	8.9	8.7	7.9	7.8
19	---	---	---	---	8.5	7.6	---	---	8.9	8.7	8.0	7.9
20	---	---	---	---	8.3	7.7	---	---	8.9	8.6	7.9	7.6
21	---	---	---	---	8.8	7.9	---	---	8.9	8.6	7.9	7.6
22	---	---	---	---	8.8	8.3	---	---	8.8	8.7	7.8	7.8
23	---	---	---	---	8.9	8.4	---	---	9.0	8.6	7.8	7.6
24	---	---	---	---	8.6	8.4	---	---	9.0	8.5	7.7	7.4
25	---	---	---	---	9.1	8.3	---	---	9.0	8.6	7.8	7.5
26	---	---	---	---	9.3	8.5	---	---	8.6	8.4	7.7	7.1
27	---	---	---	---	8.8	7.0	---	---	8.7	8.5	7.7	7.4
28	---	---	---	---	8.1	7.2	---	---	8.6	8.4	7.7	7.5
29	---	---	---	---	8.6	7.3	---	---	8.4	8.3	7.7	7.5
30	8.9	8.8	---	---	8.4	7.9	---	---	8.5	8.2	7.7	7.6
31	---	---	---	---	---	---	---	---	8.5	8.1	---	---
MONTH	---	---	---	---	9.3	7.0	---	---	---	---	8.6	7.1

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, NOVEMBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	10.5	9.6	14.3	14.1	---	---	---	---
2	---	---	---	---	10.4	9.5	14.2	14.0	---	---	---	---
3	---	---	---	---	10.4	9.5	14.1	13.7	---	---	---	---
4	---	---	---	---	10.2	9.5	14.7	13.5	---	---	---	---
5	---	---	---	---	10.3	9.6	13.7	13.6	---	---	---	---
6	---	---	---	---	11.2	10.1	15.0	13.7	---	---	---	---
7	---	---	---	---	12.4	10.8	15.0	12.0	---	---	---	---
8	---	---	---	---	12.4	11.4	15.0	13.9	---	---	---	---
9	---	---	---	---	12.3	10.5	15.0	10.7	---	---	---	---
10	---	---	---	---	11.7	10.2	15.0	10.9	---	---	---	---
11	---	---	---	---	11.3	9.4	15.0	11.1	---	---	---	---
12	---	---	9.9	8.7	9.4	8.7	15.0	15.0	---	---	---	---
13	---	---	9.7	8.5	9.3	8.9	15.0	15.0	---	---	---	---
14	---	---	9.3	8.4	10.6	9.2	15.0	15.0	---	---	---	---
15	---	---	10.4	8.9	12.3	10.4	15.0	15.0	---	---	---	---
16	---	---	11.0	10.4	11.6	11.0	15.0	15.0	---	---	10.8	10.4
17	---	---	11.4	11.0	11.1	10.9	15.0	15.0	---	---	11.2	10.7
18	---	---	11.5	10.9	11.5	11.0	15.0	13.3	---	---	12.6	10.7
19	---	---	11.2	10.7	11.0	10.6	15.0	10.7	---	---	11.2	10.0
20	---	---	11.1	9.9	11.0	10.6	14.7	10.5	---	---	10.4	10.0
21	---	---	10.5	10.2	12.1	10.8	14.4	9.9	---	---	10.8	7.8
22	---	---	10.5	10.3	11.9	11.4	14.4	10.7	---	---	10.7	7.2
23	---	---	11.4	10.5	12.6	11.4	14.2	14.0	---	---	10.2	9.7
24	---	---	12.1	11.4	12.2	11.7	14.0	13.8	---	---	10.3	9.9
25	---	---	13.1	12.1	12.6	12.2	14.0	13.6	---	---	15.0	9.8
26	---	---	12.7	12.2	14.0	12.6	13.8	10.4	---	---	11.3	10.2
27	---	---	12.3	11.6	13.9	13.7	---	---	---	---	10.2	9.3
28	---	---	11.6	10.9	14.7	13.8	---	---	---	---	9.5	8.8
29	---	---	11.1	10.3	14.3	14.1	---	---	---	---	8.9	6.5
30	---	---	10.8	10.1	14.8	14.1	---	---	---	---	8.0	6.1
31	---	---	---	---	14.3	14.1	---	---	---	---	8.5	6.5
MONTH	---	---	---	---	14.8	8.7	15.0	9.9	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	6.5	11.9	9.2	10.8	9.6	5.9	5.1	7.2	4.9	9.9	5.2
2	15.0	6.1	11.0	8.7	11.3	9.7	6.4	5.6	8.3	4.9	7.7	6.0
3	13.0	11.0	11.0	8.2	9.7	7.4	7.1	6.2	6.9	5.0	6.7	5.7
4	13.6	11.0	11.1	9.0	7.8	6.2	7.7	6.2	5.7	4.4	6.7	6.0
5	11.9	9.8	9.6	7.4	8.0	5.7	8.1	6.1	5.4	5.0	6.1	5.6
6	12.4	8.4	7.4	6.2	8.3	5.7	8.9	6.2	5.7	4.8	6.1	5.3
7	15.0	12.2	7.8	7.1	6.8	4.9	9.8	6.2	5.9	4.9	6.1	5.5
8	12.9	9.8	8.0	7.5	5.4	5.0	10.1	6.5	7.1	5.3	6.1	5.6
9	12.0	9.7	7.9	7.6	5.3	5.0	10.5	6.4	7.4	5.2	5.7	5.4
10	11.9	9.4	7.8	7.6	5.1	4.7	9.1	5.5	7.2	4.7	6.1	5.1
11	11.0	9.0	7.6	7.3	5.7	4.5	5.6	5.0	7.2	3.9	6.1	5.3
12	10.2	8.2	7.5	7.2	5.5	5.1	5.7	4.9	7.7	4.1	7.1	5.9
13	10.3	8.6	7.9	7.4	5.7	5.0	5.6	5.2	---	---	6.6	6.3
14	11.7	7.7	8.5	2.5	5.9	4.7	5.8	5.0	---	---	6.6	6.4
15	10.6	8.5	6.3	1.7	5.8	4.9	5.9	5.3	---	---	6.8	6.3
16	10.2	8.0	2.8	1.5	7.0	5.6	6.0	4.9	---	---	6.7	6.2
17	10.1	7.9	7.2	0.8	6.7	5.8	6.3	4.8	11.2	8.6	7.4	5.9
18	11.2	7.6	6.6	6.2	8.0	5.6	5.6	4.6	11.7	6.0	7.0	6.4
19	8.9	7.0	6.9	6.0	7.1	6.0	6.3	4.2	12.0	5.5	7.2	6.4
20	8.6	5.2	7.7	6.1	10.5	5.4	7.3	4.8	11.8	5.6	7.1	6.1
21	9.2	6.0	9.2	6.3	10.5	6.3	8.7	5.1	10.6	5.3	7.2	6.9
22	9.6	6.0	10.2	7.2	10.5	6.3	10.5	5.8	8.2	4.9	7.7	7.2
23	8.1	5.9	9.7	7.4	10.6	6.3	11.3	6.2	12.6	4.7	7.4	7.1
24	8.5	4.2	8.6	7.0	11.0	6.5	8.1	5.9	13.0	6.5	8.2	---
25	---	---	7.4	6.0	9.6	6.1	7.3	5.4	11.7	6.6	---	---
26	---	---	7.9	6.8	9.7	4.1	5.6	4.4	9.2	6.0	---	---
27	---	---	7.8	5.5	5.5	4.8	5.6	4.7	9.5	5.8	---	---
28	---	---	7.8	7.1	5.2	4.8	5.4	4.4	8.1	6.6	---	---
29	---	---	8.7	7.8	5.0	4.8	4.9	4.4	8.5	6.7	---	---
30	12.1	10.5	9.8	8.6	5.3	4.9	5.5	4.3	9.2	6.1	---	---
31	---	---	10.9	8.4	---	---	6.2	4.8	9.6	5.8	---	---
MONTH	15.0	4.2	11.9	0.8	11.3	4.1	11.3	4.2	13.0	3.9	9.9	---
YEAR	15.0	0.8										

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, NOVEMBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	11.5	9.5	0.5	0.0	---	---	14.5	9.0
2	---	---	---	---	12.0	10.5	1.0	0.0	---	---	10.5	9.0
3	---	---	---	---	12.0	10.0	1.5	0.0	---	---	9.5	8.5
4	---	---	---	---	11.5	8.5	3.0	1.5	---	---	---	---
5	---	---	---	---	8.5	6.5	3.0	1.5	---	---	---	---
6	---	---	---	---	6.5	3.5	1.5	0.0	---	---	---	---
7	---	---	---	---	3.5	2.5	3.0	0.0	---	---	---	---
8	---	---	---	---	4.0	2.5	0.0	0.0	---	---	---	---
9	---	---	---	---	5.5	3.5	0.0	0.0	---	---	---	---
10	---	---	---	---	5.5	4.5	0.0	0.0	---	---	6.0	4.5
11	---	---	---	---	7.0	4.5	0.5	0.0	---	---	8.5	5.5
12	---	---	12.5	11.5	8.5	7.0	0.5	0.0	---	---	11.5	7.0
13	---	---	12.5	11.0	7.0	5.0	1.0	0.0	---	---	14.0	10.0
14	---	---	11.5	9.0	5.5	4.5	2.0	1.0	---	---	18.0	11.5
15	---	---	8.5	6.0	5.0	4.0	4.0	0.5	---	---	17.5	14.0
16	---	---	6.0	5.0	5.5	4.0	1.0	0.0	1.5	0.5	14.0	7.5
17	---	---	5.5	4.0	5.5	3.5	1.0	0.0	2.5	0.0	7.5	5.5
18	---	---	5.5	4.5	5.5	4.0	1.5	0.0	---	---	6.5	4.5
19	---	---	6.5	5.0	6.5	4.5	0.5	0.0	---	2.5	6.0	5.0
20	---	---	8.0	6.5	6.5	4.0	0.5	0.0	6.0	4.0	5.0	4.0
21	---	---	6.5	5.5	5.0	4.0	0.5	0.0	5.0	4.5	4.0	3.5
22	---	---	6.0	5.0	5.5	4.0	1.0	0.0	4.5	4.0	6.0	5.5
23	---	---	5.0	1.5	7.5	5.5	1.0	0.0	4.0	3.5	5.5	3.5
24	---	---	1.5	0.5	6.5	3.5	0.5	0.0	3.5	3.0	5.0	3.0
25	---	---	0.5	0.5	3.5	1.0	2.0	0.0	4.0	2.5	5.5	3.5
26	---	---	1.5	0.5	1.0	0.0	2.0	0.0	7.0	4.0	7.5	4.0
27	---	---	5.0	1.5	0.0	0.0	---	---	9.5	6.5	8.5	5.5
28	---	---	6.5	5.0	0.0	0.0	---	---	10.0	6.5	10.5	7.0
29	---	---	8.5	6.5	0.5	0.0	---	---	---	---	10.5	9.0
30	---	---	9.5	8.5	0.5	0.0	---	---	---	---	10.5	7.0
31	---	---	---	---	0.5	0.0	---	---	---	---	12.0	7.5
MONTH	---	---	---	---	12.0	0.0	4.0	0.0	---	---	18.0	3.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	10.5	17.0	13.5	---	21.5	27.5	26.0	26.0	22.5	27.0	23.5
2	10.5	9.0	16.5	13.5	25.0	23.5	27.5	25.0	26.0	23.5	25.5	22.5
3	11.0	8.0	16.5	13.5	25.0	24.0	27.0	24.0	25.0	24.0	23.0	22.0
4	12.0	8.0	15.5	13.5	26.5	23.5	27.5	24.5	24.0	23.0	23.5	21.5
5	10.5	9.0	14.0	13.0	28.0	25.0	27.0	25.5	23.5	22.0	25.5	22.5
6	10.0	8.0	15.0	13.5	29.0	26.0	28.5	25.0	24.5	22.0	25.5	23.5
7	11.0	10.0	15.0	14.5	28.5	25.0	29.0	26.0	25.5	23.0	25.5	24.0
8	12.5	8.5	14.5	13.5	24.5	22.0	28.5	26.5	26.5	23.0	26.5	24.0
9	14.0	10.5	16.0	13.5	23.0	21.5	29.5	27.0	27.0	24.5	27.0	24.5
10	15.0	11.0	18.0	15.5	24.5	21.0	28.5	26.0	28.5	25.5	27.0	25.0
11	16.0	10.5	17.5	16.5	25.5	22.5	26.0	25.0	29.0	26.0	26.0	23.0
12	17.5	13.0	17.0	16.0	25.0	24.0	26.5	23.5	28.5	24.5	23.5	18.0
13	18.0	16.0	16.5	14.5	27.0	24.0	27.0	24.0	---	---	20.5	20.0
14	16.5	14.5	18.0	14.0	27.0	25.0	27.5	25.5	---	---	21.5	15.0
15	18.0	13.0	19.0	15.5	25.0	24.0	27.5	25.0	---	---	23.0	20.5
16	17.0	12.5	21.0	17.0	26.5	23.5	28.0	25.5	---	---	22.0	21.5
17	16.5	16.0	20.5	19.0	26.5	23.5	28.0	25.5	28.0	26.0	23.0	21.0
18	20.0	16.0	23.5	19.0	27.5	24.0	27.0	25.0	28.0	24.0	22.0	21.0
19	20.0	16.0	24.5	21.5	26.0	24.5	26.5	24.0	28.0	24.0	21.5	21.0
20	22.5	18.5	24.5	21.5	28.0	23.5	27.5	24.0	27.5	25.0	21.0	19.5
21	20.5	18.0	24.0	21.5	28.5	26.0	27.0	24.0	28.0	25.5	19.5	18.0
22	19.5	15.5	23.0	20.5	28.0	25.5	28.0	24.0	26.5	25.0	19.5	17.0
23	19.5	15.5	21.5	19.5	28.0	25.0	28.5	24.5	27.0	24.0	19.5	18.0
24	18.5	14.0	22.5	20.5	29.0	25.0	26.5	25.0	26.5	22.5	19.5	17.5
25	18.5	15.0	21.5	19.0	28.5	26.0	27.0	24.5	25.5	22.5	18.5	17.5
26	19.0	16.0	20.0	17.5	29.5	22.0	26.0	25.0	25.5	22.5	18.0	16.5
27	18.0	15.0	---	---	25.0	21.5	25.5	24.0	24.5	23.0	20.0	18.0
28	19.5	15.5	---	---	26.5	24.5	26.0	23.5	23.5	22.0	22.0	19.0
29	17.5	15.5	---	---	27.0	24.5	27.0	24.0	25.0	21.5	23.0	21.0
30	18.0	14.5	---	---	27.5	25.5	25.0	23.5	26.0	22.5	24.5	22.5
31	---	---	---	---	---	---	25.5	22.5	26.5	23.0	---	---
MONTH	22.5	8.0	24.5	13.0	29.5	21.0	29.5	22.5	29.0	21.5	27.0	16.5
YEAR	29.5	0.0										

No Tape

03246400 EAST FORK LITTLE MIAMI RIVER NEAR WILLIAMSBURG, OHIO
(Formerly published as 03246500 East Fork Little Miami River at Williamsburg, Ohio)

LOCATION.--Lat 39°03'32", long 84°03'05", Clermont County, at downstream end of center pier of bridge on McKeevers Road near Williamsburg, 0.5 mile upstream from sewage disposal plant, 1.0 mile upstream from gaging station, and 2.1 miles upstream from Todd Run.

DRAINAGE AREA.--234 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1966-70 (partial-record station); November 1970 to September 1971. Water temperatures: December 1970 to September 1971.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since December 1970. Interruptions in the record were due to malfunctions of the instrument. Tabular data omitted for those periods when no data were recorded.

CHEMICAL ANALYSES, NOVEMBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
NOV. 10...	1030	43	4.1	140	170	36	42	63	14	9.4	4.7	186
DEC. 22...	1325	3000	4.6	1000	3300	150	540	40	2.1	4.6	4.7	81
FEB. 12...	1330	111	6.8	300	300	96	96	56	15	13	4.5	172
MAR. 17...	1300	278	7.0	890	1400	120	200	39	12	7.2	5.6	116
APR. 29...	1130	15	4.8	60	100	110	140	67	25	12	2.0	262
JUNE 09...	1700	86	5.4	400	1200	80	130	37	8.5	6.0	3.3	110
JULY 20...	1045	62	6.2	410	930	53	130	41	8.9	5.0	3.8	132
SEP. 01...	1145	26	5.2	520	550	200	200	34	7.7	4.8	4.7	115

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)
NOV. 10...	0	51	18	.4	2.1	265	210	62	453	7.6	11.5	20
DEC. 22...	0	30	12	.2	9.1	200	108	42	255	7.1	5.5	100
FEB. 12...	0	44	29	.5	9.8	294	200	60	465	7.6	1.0	45
MAR. 17...	0	36	18	.5	13	212	150	55	311	7.2	6.5	100
APR. 29...	0	58	22	.6	1.9	328	270	55	559	8.0	14.0	10
JUNE 09...	0	31	11	.3	13	198	130	90	288	7.3	22.5	65
JULY 20...	0	31	10	.2	7.3	194	140	32	300	7.4	23.0	40
SEP. 01...	0	21	9.0	.2	4.3	163	120	26	258	7.3	23.5	65

03246400 EAST FORK LITTLE MIAMI RIVER NEAR WILLIAMSBURG, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), DECEMBER 1970 TO SEPTEMBER 1971

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	339	296	396	381	287	272
2	---	---	---	---	---	---	359	339	396	383	288	138
3	---	---	---	---	423	416	399	359	383	356	201	139
4	---	---	---	---	431	423	429	399	356	178	220	153
5	---	---	518	517	438	430	446	429	306	230	270	207
6	---	---	518	479	442	433	462	446	313	300	319	270
7	---	---	494	407	443	304	478	462	303	298	357	230
8	---	---	402	329	304	195	475	469	308	303	365	253
9	---	---	361	340	275	240	481	471	313	305	348	313
10	---	---	346	340	316	271	482	185	320	312	331	313
11	---	---	370	346	336	287	436	183	329	320	348	331
12	---	---	395	370	389	336	287	218	332	328	423	346
13	---	---	410	395	427	389	285	225	---	---	352	191
14	---	---	913	410	450	427	311	285	---	---	334	278
15	---	---	457	431	459	442	310	281	---	---	329	278
16	---	---	475	456	481	459	422	280	---	---	372	329
17	---	---	462	141	496	472	407	273	---	---	406	372
18	---	---	301	234	501	493	278	268	---	---	444	406
19	---	---	349	301	505	500	277	255	---	---	477	444
20	---	---	367	342	505	501	289	255	---	---	494	477
21	---	---	390	367	508	495	288	255	---	---	520	482
22	---	---	410	390	502	490	296	263	---	---	534	490
23	---	---	428	410	490	478	317	296	---	---	490	444
24	---	---	440	428	476	436	320	309	---	---	460	444
25	---	---	430	395	436	395	320	309	314	164	483	460
26	---	---	430	361	464	185	336	317	268	180	483	203
27	---	---	435	417	193	153	355	245	388	232	287	242
28	---	---	---	---	221	193	293	279	236	227	313	269
29	---	---	---	---	257	221	318	276	237	226	356	313
30	---	---	---	---	296	257	277	277	257	237	403	356
31	---	---	---	---	---	---	381	281	272	257	---	---
MONTH	---	---	---	---	508	153	482	183	---	---	534	138

TEMPERATURE (°C) OF WATER, DECEMBER 1970 TO SEPTEMBER 1971

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	27.0	26.0	24.0	22.0	25.0	22.5
2	---	---	---	---	---	---	27.5	25.0	24.5	22.5	24.0	21.5
3	---	---	---	---	26.0	24.0	27.5	24.5	24.5	24.0	21.5	21.5
4	---	---	---	---	28.0	23.5	27.0	24.5	24.0	21.5	21.5	20.5
5	---	---	14.5	14.0	29.0	24.5	27.5	25.5	22.5	21.5	22.5	20.5
6	---	---	16.5	14.5	30.0	25.5	28.5	25.5	24.0	21.0	24.0	22.5
7	---	---	16.5	16.0	27.5	23.5	28.5	25.0	24.0	22.0	24.5	23.0
8	---	---	16.5	15.0	25.0	22.0	28.5	25.5	25.0	22.5	25.5	23.0
9	---	---	18.0	14.5	24.0	22.5	30.0	26.0	25.5	23.0	25.5	23.5
10	---	---	20.0	16.0	22.5	19.0	29.0	23.5	26.5	24.5	26.0	24.0
11	---	---	19.5	18.5	23.5	20.5	25.0	23.5	27.5	25.0	25.5	23.5
12	---	---	18.5	16.5	24.5	22.5	25.0	23.0	27.0	23.5	23.5	21.5
13	---	---	16.5	14.0	26.0	23.0	26.0	23.5	---	---	21.5	20.0
14	---	---	18.0	13.5	27.0	24.0	27.0	25.0	---	---	21.5	19.0
15	---	---	19.0	16.5	24.5	22.5	26.5	24.5	---	---	22.5	20.0
16	---	---	21.5	18.0	27.0	22.5	27.5	24.5	---	---	22.0	21.0
17	---	---	21.0	15.0	27.0	23.0	29.0	24.0	---	---	22.0	21.0
18	---	---	21.5	17.5	27.5	23.5	26.5	24.0	---	---	22.0	21.5
19	---	---	23.0	20.0	27.0	24.5	25.0	23.5	---	---	22.0	21.5
20	---	---	23.5	21.0	28.5	23.5	25.5	23.5	---	---	22.0	20.5
21	---	---	23.0	20.5	29.0	25.0	25.0	23.0	---	---	20.5	18.5
22	---	---	22.5	19.5	28.0	25.0	25.5	23.0	---	---	20.0	18.0
23	---	---	21.0	18.5	28.5	24.0	27.0	23.5	---	---	20.0	19.0
24	---	---	22.0	20.0	27.0	24.5	24.5	24.0	---	---	20.0	18.0
25	---	---	21.0	18.5	27.5	25.0	25.0	23.5	28.0	21.5	19.0	17.5
26	---	---	20.0	17.5	28.5	21.5	26.5	24.0	22.5	20.0	18.5	17.5
27	---	---	19.5	18.0	25.0	21.5	25.0	22.5	22.0	20.5	20.5	18.5
28	---	---	---	---	26.0	24.5	24.5	22.5	21.0	19.5	22.5	20.0
29	---	---	---	---	27.0	24.5	25.0	23.5	22.0	19.0	23.5	21.5
30	---	---	---	---	27.5	26.0	24.0	23.0	23.0	20.5	24.5	22.5
31	---	---	---	---	---	---	24.0	22.0	24.0	21.5	---	---
MONTH	---	---	---	---	30.0	19.0	30.0	22.0	---	---	26.0	17.5

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO

LOCATION.--Lat 40°17'13", long 84°09'00", Shelby County, 50 ft downstream from gaging station at North Street Bridge in Sidney, and 0.5 mile downstream from Tawawa Creek.

DRAINAGE AREA.--541 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1971.
Water temperatures: October 1967 to September 1971.
Sediment records: October 1967 to September 1971.

EXTREMES.--1970-71:
Sediment concentrations: Maximum daily, 1,310 mg/l June 26; minimum daily, 4 mg/l Dec. 25, 26.
Sediment discharges: Maximum daily, 8,880 tons June 26; minimum daily, 1.0 ton Nov. 6.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRITE (NO2) (MG/L)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)
OCT.											
07...	0752	34	354	0	71	26	--	.05	.14	1.7	.43
14...	0910	78	330	0	62	24	.7	.05	.05	.9	.62
21...	0810	50	324	0	70	20	--	.00	.01	2.3	1.7
28...	0805	44	356	0	72	26	--	.05	.00	1.4	.21
NOV.											
11...	0920	51	342	4	77	27	--	.05	.03	1.3	.69
DEC.											
16...	0955	122	298	0	120	30	--	.10	.11	14	.88
JAN.											
13...	0920	95	326	0	130	26	--	.12	.08	16	1.4
FEB.											
24...	0800	2550	102	0	44	14	--	.08	.09	15	1.0
MAR.											
31...	0805	241	250	0	100	24	--	.08	.04	17	.31
APR.											
26...	0800	108	266	0	90	20	--	.05	.01	1.1	.41
MAY											
26...	0910	262	284	0	88	20	--	.13	.06	9.0	.62
JUNE											
30...	0915	326	242	0	82	18	--	.42	.20	29	.98
JULY											
07...	0845	100	312	0	88	18	--	.13	.20	8.4	.82
14...	0745	177	218	0	72	20	--	.15	.04	18	.53
21...	0910	95	300	0	92	26	--	.18	.07	1.7	.88
28...	0750	144	248	0	70	22	--	.12	.03	7.0	.80
AUG.											
04...	1000	57	272	0	77	28	--	.05	.01	.7	.96
11...	0845	46	282	0	85	28	.8	.09	.12	.3	.69
18...	0930	40	314	0	83	28	--	.04	.06	.3	.86
25...	0920	46	282	0	59	26	--	.06	.02	.5	1.3
SEP.											
01...	0920	32	336	0	74	28	--	.15	.03	5.3	.96
08...	0925	70	332	0	66	30	--	.12	.09	.5	3.6
15...	0930	43	340	0	71	32	--	.06	.02	1.3	.40
22...	0915	67	338	0	70	32	--	.10	.07	2.8	.60

DATE	TIME	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.										
14...	0910	270	28	6	27	6	0	0	.00	2
AUG.										
11...	0845	500	150	0	0	6	30	10	--	3

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO--Continued

EXTREMES.--Period of record:
Water temperatures (1967-68): Maximum, 29.0°C Aug. 24, 1968; minimum, freezing point on many days during December 1967, January to March 1968.
Sediment concentrations: Maximum daily, 1,310 mg/l June 26, 1971; minimum daily, 0 mg/l Mar. 23-25, 1970.
Sediment discharges: Maximum daily, 8,880 tons June 26, 1971; minimum daily, 0 tons Mar. 23-25, 1970.

REMARKS.--Samples for iron and manganese were filtered clear when collected. Samples were collected weekly October, July to September and monthly November to June. Special samples were also collected twice during the year to further define the quality of water. Flow affected by ice Nov. 24, 25, Dec. 25 to Jan. 4, Jan. 6 to Feb. 11.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	ODOR (THRESHOLD NUMBER)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.										
07...	414	370	80	710	8.1	12.5	20	2	9.7	91
14...	398	340	69	669	8.2	17.0	15	0	8.5	88
21...	402	350	84	655	8.1	9.5	15	0	10.6	93
28...	434	380	88	722	8.1	18.0	10	2	9.2	97
NOV.										
11...	436	390	100	738	8.3	10.0	8	2	11.2	99
DEC.										
16...	488	400	160	773	8.0	.5	5	2	12.4	86
JAN.										
13...	510	430	160	801	8.1	.0	4	0	13.2	90
FEB.										
24...	188	160	76	324	7.7	1.0	80	4	12.0	84
MAR.										
31...	394	330	120	655	8.1	5.5	6	4	12.3	98
APR.										
28...	380	320	100	634	8.1	11.0	10	4	11.2	100
MAY										
26...	406	340	110	645	8.0	14.5	35	2	10.0	97
JUNE										
30...	390	300	100	580	7.7	24.0	45	0	7.3	86
JULY										
07...	432	360	100	667	8.0	27.0	30	2	8.8	110
14...	342	270	91	513	7.8	23.0	30	2	8.4	96
21...	418	340	94	663	8.1	20.5	30	4	11.1	122
28...	330	280	76	564	7.9	17.0	20	2	10.4	107
AUG.										
04...	358	310	86	615	8.0	17.5	15	2	9.7	101
11...	398	320	88	634	7.9	23.5	25	0	7.5	87
18...	398	350	92	675	8.0	21.0	55	0	9.6	107
25...	354	300	66	599	8.0	21.0	30	2	9.2	102
SEP.										
01...	404	310	34	667	8.1	22.0	45	4	8.7	99
08...	400	330	58	677	7.9	22.5	25	2	8.9	100
15...	418	360	81	704	8.0	20.0	30	0	9.3	101
22...	438	350	72	702	8.1	15.5	20	0	9.4	94

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
(ONCE-DAILY MEASUREMENT BETWEEN 1500 AND 1800)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	---	3.0	---	---	---	8.0	---	21.0	---	---	24.0
2	17.0	10.0	9.0	1.0	---	4.0	6.0	---	---	24.0	24.0	22.0
3	---	10.0	8.0	---	---	1.0	---	---	22.0	---	24.0	22.0
4	---	9.0	5.0	0.0	2.0	---	---	---	21.0	---	21.0	---
5	---	7.0	0.5	0.0	---	1.0	---	12.0	---	---	23.0	---
6	---	9.0	---	0.0	---	---	---	15.0	---	---	---	---
7	19.0	---	1.0	---	---	---	8.0	12.0	---	---	---	---
8	19.0	---	2.0	0.0	1.0	---	10.0	12.0	23.0	---	---	---
9	18.0	---	3.0	---	---	1.0	11.0	15.0	21.0	---	21.0	---
10	18.0	10.0	1.5	---	---	0.0	---	17.0	---	---	27.0	---
11	18.0	10.0	---	0.0	---	2.0	---	---	---	---	23.5	---
12	16.0	10.0	---	0.0	0.0	5.0	---	13.0	---	---	26.0	---
13	16.0	9.0	---	---	---	---	12.0	16.5	---	---	26.0	---
14	17.0	---	2.0	0.0	---	---	12.0	15.0	---	---	---	---
15	14.0	---	2.0	1.0	0.0	8.0	13.0	---	---	24.5	---	---
16	12.5	5.0	2.0	0.0	0.0	4.0	---	---	---	---	25.0	---
17	---	4.0	2.0	---	0.0	5.5	---	19.0	---	---	26.0	---
18	13.0	5.0	2.0	0.0	2.0	4.0	13.0	---	---	---	26.0	---
19	13.0	7.0	0.0	0.0	1.0	2.0	13.0	---	---	24.0	25.0	---
20	10.0	4.0	0.0	1.0	0.0	---	17.0	---	---	24.0	25.0	---
21	11.0	4.0	---	0.0	0.0	---	13.0	20.0	---	25.0	---	---
22	13.0	---	2.0	1.0	2.0	3.0	---	---	---	26.0	---	---
23	14.0	2.0	3.0	---	0.0	2.0	---	---	---	---	25.0	---
24	---	---	1.0	---	0.0	3.0	---	---	---	---	25.0	---
25	---	2.0	---	0.0	2.0	3.0	---	---	27.0	---	22.0	---
26	11.0	---	---	---	3.0	5.0	14.0	---	---	23.0	24.0	---
27	16.0	---	---	---	5.0	---	12.0	14.0	---	22.0	24.0	---
28	14.0	---	0.0	---	4.0	---	13.0	15.0	26.0	22.0	---	---
29	12.0	---	0.0	---	---	5.0	11.0	---	26.0	---	---	---
30	15.0	---	0.0	---	---	7.0	---	---	26.0	---	25.0	---
31	---	---	---	---	---	---	---	---	---	22.0	25.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	WATER TEMP-ERA-TURE (°C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
FEB. 18,1971	1615	2.0	1900	212	1090	49	62	77	89	94	96	98	99	100	--	--
JUNE 7......	0840	20.0	519	558	782	56	75	84	91	96	98	99	100	--	--	--
JUNE 26.....	0715	19.0	2530	2030	13900	52	72	84	94	98	99	99	100	--	--	--

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	38	42	4.3	50	23	3.1	75	35	7.1
2	37	39	3.9	51	16	2.2	73	22	4.3
3	36	37	3.6	65	19	3.3	80	21	4.5
4	36	35	3.4	65	17	3.0	96	18	4.7
5	30	33	2.7	59	10	1.6	100	14	3.8
6	31	41	3.4	53	7	1.0	89	13	3.1
7	32	58	5.0	51	9	1.2	80	13	2.8
8	31	77	6.4	49	13	1.7	76	13	2.7
9	32	85	7.3	48	17	2.2	75	11	2.2
10	40	67	7.2	52	18	2.5	75	8	1.6
11	38	59	6.1	49	10	1.3	77	8	1.7
12	45	58	7.0	45	15	1.8	124	19	6.7
13	59	48	7.6	49	22	2.9	204	28	15
14	75	34	6.9	50	22	3.0	185	14	7.0
15	64	39	6.7	57	25	3.8	141	7	2.7
16	60	31	5.0	70	31	5.9	125	10	3.4
17	54	21	3.1	108	131	55	148	14	5.6
18	51	27	3.7	238	214	138	141	13	5.7
19	44	40	4.8	238	25	16	158	11	4.7
20	45	53	6.4	238	8	5.1	141	12	4.6
21	49	65	8.6	258	16	11	128	15	5.2
22	50	69	9.3	250	17	11	179	22	11
23	49	67	8.9	238	10	6.4	340	44	40
24	47	63	8.0	180	26	13	328	22	19
25	46	60	7.5	180	31	15	210	4	2.3
26	46	60	7.5	220	28	17	130	4	1.4
27	44	42	5.0	215	28	16	160	6	2.6
28	42	56	6.4	185	31	15	120	10	3.2
29	48	31	4.0	98	34	9.0	100	12	3.2
30	50	34	4.6	77	36	7.5	90	14	3.4
31	53	34	4.9	--	--	--	80	10	2.2
TOTAL	1402	--	179.2	3586	--	375.5	4148	--	187.4

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	74	10	2.0	60	10	1.6	1040	41	115
2	72	16	3.1	58	10	1.6	778	35	74
3	76	20	4.1	56	10	1.5	624	24	40
4	260	80	70	200	240	289	555	18	27
5	598	126	203	1600	435	1880	343	23	21
6	280	73	55	1100	174	517	314	25	21
7	180	77	37	550	127	189	773	87	193
8	160	34	15	260	83	58	710	54	110
9	140	18	6.8	180	43	21	453	9	11
10	120	19	6.2	170	35	16	432	14	16
11	110	18	5.3	160	33	14	428	12	14
12	100	11	3.0	252	34	31	531	28	46
13	95	15	3.8	559	90	136	1180	55	175
14	160	56	26	390	62	65	1330	49	176
15	200	35	19	250	41	28	1380	112	417
16	150	10	4.1	183	28	14	1500	198	802
17	130	15	5.3	848	190	709	1160	72	226
18	110	24	7.1	2010	262	1420	868	54	127
19	100	19	5.1	2160	229	1340	714	30	58
20	95	13	3.3	2940	391	3100	872	22	52
21	90	20	4.9	2120	328	1880	858	22	51
22	85	17	3.9	3760	514	5200	764	56	116
23	80	15	3.2	3750	270	2730	710	33	63
24	78	15	3.2	2410	129	839	588	15	24
25	76	18	3.7	1760	96	456	432	14	16
26	74	20	4.0	1750	90	425	375	15	15
27	72	19	3.7	2000	95	513	354	15	14
28	70	16	3.0	1520	63	259	293	17	13
29	68	12	2.2	--	--	--	290	19	15
30	64	10	1.7	--	--	--	288	17	13
31	62	10	1.7	--	--	--	229	20	12
TOTAL	4029	--	519.4	33056	--	22133.7	21166	--	3073

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	198	27	14	98	32	8.5	122	24	7.9
2	241	24	16	92	33	8.2	127	32	11
3	290	20	16	102	29	8.0	326	67	68
4	272	17	12	117	23	7.3	511	170	235
5	229	14	8.7	100	21	5.7	316	109	93
6	275	12	8.9	162	58	29	236	49	31
7	288	14	11	678	101	192	388	240	293
8	198	20	11	1230	111	369	250	76	51
9	158	21	9.0	1380	88	328	206	73	41
10	183	30	15	998	40	108	161	77	33
11	159	40	17	642	19	33	122	63	21
12	127	29	9.9	778	39	82	106	46	13
13	128	35	12	863	38	89	116	51	16
14	189	31	16	522	29	41	139	61	23
15	189	26	13	387	31	32	117	82	26
16	156	8	3.4	314	22	19	96	70	18
17	143	13	5.0	255	25	17	88	61	14
18	143	19	7.3	238	22	14	72	67	13
19	143	22	8.5	208	18	10	66	53	9.4
20	117	23	7.3	191	19	9.8	65	41	7.2
21	111	29	8.7	198	20	11	67	155	28
22	120	38	12	198	29	16	70	103	19
23	132	36	13	177	38	18	68	77	14
24	116	24	7.5	141	37	14	59	76	12
25	150	39	16	200	38	21	97	190	109
26	116	28	8.8	250	38	26	2690	1310	8880
27	112	16	4.8	215	37	21	2080	420	2360
28	106	23	6.6	195	33	17	1070	241	696
29	106	29	8.3	161	24	10	511	138	190
30	112	28	8.5	150	24	9.7	323	90	78
31	--	--	--	139	24	9.0	--	--	--
TOTAL	5007	--	315.2	11379	--	1583.2	10665	--	13410.5

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	393	146	155	75	51	10	33	67	6.0
2	298	100	80	66	50	8.9	39	67	7.1
3	215	92	53	60	55	8.9	42	73	8.3
4	156	82	35	56	53	8.0	45	70	8.5
5	128	74	26	60	68	11	45	60	7.3
6	116	70	22	65	70	12	47	60	7.6
7	99	76	20	54	61	8.9	72	70	14
8	81	86	19	49	56	7.4	68	70	13
9	75	71	14	45	56	6.8	51	60	8.3
10	81	61	13	45	64	7.8	43	60	7.0
11	95	58	15	48	87	11	39	60	6.3
12	248	140	104	53	69	9.9	42	50	5.7
13	248	99	66	65	52	9.1	41	50	5.5
14	179	69	33	46	51	6.3	41	50	5.5
15	152	59	24	41	52	5.8	42	50	5.7
16	105	55	16	39	63	6.6	38	50	5.1
17	91	53	13	40	73	7.9	35	50	4.7
18	86	56	13	38	91	9.3	35	50	4.7
19	77	64	13	35	93	8.8	35	50	4.7
20	78	67	14	108	142	45	54	70	10
21	89	73	18	114	85	26	75	60	12
22	59	68	11	76	72	15	80	50	11
23	50	49	6.6	57	63	9.7	53	42	6.0
24	92	78	20	48	62	8.0	45	39	4.7
25	185	58	29	46	57	7.1	48	39	5.1
26	191	84	44	41	80	8.9	77	50	10
27	148	49	20	39	60	6.3	112	67	20
28	141	44	17	42	50	5.7	91	43	11
29	102	88	24	40	64	6.9	82	27	6.0
30	92	49	12	37	74	7.4	59	21	3.3
31	85	48	11	34	80	7.3	--	--	--
TOTAL	4235	--	960.6	1662	--	317.7	1609	--	234.1

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	101944
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	43289.5

See page 138 for particle-size distribution of suspended sediment.

03261950 LORAMIE CREEK NEAR NEWPORT, OHIO

LOCATION.--Lat 40°18'25", long 84°23'02", in SE 1/4 sec.24, T.11 N., R.4 E., Shelby County, at gaging station on right bank at downstream side of bridge on Cardo Roman Road, 1.1 miles northwest of Newport, 3 miles south of Fort Loramie, and 3 miles downstream from Mile Creek.

DRAINAGE AREA.--152 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1966-67, 1969-71 (partial-record station).
Water temperatures: October 1967 to September 1970.
Sediment records: October 1967 to September 1971.

EXTREMES.--1970-71:
Sediment concentrations: Maximum daily, 506 mg/l June 26; minimum daily, 3 mg/l Jan. 1, 2.
Sediment discharges: Maximum daily, 892 tons Feb. 20; minimum daily, 0.02 ton Feb. 1-3.

Period of record:
Sediment concentrations: Maximum daily, 715 mg/l Jan. 29, 1969; minimum daily, 3 mg/l Jan. 12, 1971.
Sediment discharges: Maximum daily, 2,060 tons Jan. 29, 1969; minimum daily, 0.02 ton Feb. 1-3, 1971.

REMARKS.--Chemical data for this station on page 368. Flow affected by ice Dec. 24-27, Jan. 6-8, 16-20, Jan. 25 to Feb. 1. Some regulation by Lake Loramie 5 miles upstream (capacity 13,000 acre-ft).

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.82	49	.11	1.8	37	.18	6.5	26	.46
2	.77	47	.10	2.1	35	.20	6.8	22	.40
3	.82	44	.10	4.3	35	.41	6.0	19	.31
4	.82	42	.09	5.2	35	.49	6.2	15	.25
5	.82	38	.08	4.3	35	.41	5.0	15	.20
6	.77	38	.08	3.9	36	.38	3.9	15	.16
7	.94	38	.10	3.1	36	.30	3.5	15	.14
8	.88	38	.09	3.0	37	.30	3.1	15	.13
9	.82	38	.08	2.4	37	.24	3.1	15	.13
10	4.5	60	.73	3.9	42	.44	3.1	15	.13
11	3.2	21	.18	3.3	40	.36	3.3	15	.13
12	5.8	33	.52	2.5	26	.18	19	64	4.1
13	15	28	1.4	2.0	18	.10	40	48	5.7
14	7.1	19	.36	1.0	16	.04	16	16	.69
15	7.7	20	.42	2.4	15	.10	8.7	15	.35
16	5.2	22	.31	1.8	12	.06	7.4	17	.34
17	3.0	22	.18	1.1	12	.04	51	63	13
18	1.8	22	.11	.94	12	.03	105	54	15
19	1.1	22	.07	.88	12	.03	94	29	7.4
20	.94	23	.06	4.2	27	.31	87	24	5.6
21	2.1	24	.14	9.8	28	.74	84	24	5.4
22	2.0	31	.17	7.1	17	.33	115	52	18
23	1.5	37	.15	5.7	13	.20	193	69	36
24	1.1	43	.13	4.3	13	.15	110	20	5.9
25	1.2	50	.16	3.5	13	.12	50	13	1.8
26	2.0	54	.29	3.3	13	.12	25	8	.54
27	1.7	52	.24	3.7	13	.13	12	5	.16
28	1.7	49	.22	4.5	13	.16	7.7	4	.08
29	1.8	46	.22	5.7	15	.23	5.7	4	.06
30	3.0	43	.35	8.0	29	.63	4.5	4	.05
31	2.4	40	.26	--	--	--	3.9	4	.04
TOTAL	83.30	--	7.50	109.72	--	7.41	1089.4	--	122.65

03261950 LORAMIE CREEK NEAR NEWPORT, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.7	3	.03	1.8	5	.02	244	41	27
2	3.3	3	.03	1.6	4	.02	172	37	17
3	3.7	7	.07	1.4	4	.02	133	31	11
4	266	218	187	134	110	111	80	27	5.8
5	294	99	84	985	251	668	26	25	1.8
6	100	31	8.4	750	78	160	40	25	2.9
7	55	13	1.9	226	47	29	163	80	35
8	20	10	.54	87	30	7.0	140	50	19
9	12	9	.29	26	24	1.7	108	33	9.6
10	10	8	.22	20	17	.92	90	29	7.0
11	8.7	7	.16	15	16	.65	92	27	6.7
12	8.0	6	.13	116	87	63	204	110	63
13	7.4	5	.10	315	152	144	595	208	334
14	18	12	.58	120	57	18	460	58	72
15	30	12	.97	59	37	5.9	526	166	261
16	18	6	.29	39	28	2.9	630	144	245
17	10	6	.16	326	147	231	361	72	70
18	8.8	6	.14	937	148	374	219	64	38
19	8.0	6	.13	919	130	323	186	67	34
20	7.5	6	.12	1300	254	892	198	66	35
21	7.1	6	.12	859	132	306	167	58	26
22	6.5	6	.11	1070	226	736	146	53	21
23	6.8	6	.11	1460	145	572	118	51	16
24	6.2	6	.10	755	91	186	88	46	11
25	5.6	6	.09	292	88	69	36	43	4.2
26	5.0	6	.08	417	108	122	44	42	5.0
27	4.4	6	.07	718	77	149	38	41	4.2
28	3.6	6	.06	411	50	55	39	42	4.4
29	3.0	6	.05	--	--	--	39	43	4.5
30	2.6	5	.04	--	--	--	30	47	3.8
31	2.2	5	.03	--	--	--	24	51	3.3
TOTAL	945.1	--	286.12	12368.8	--	5227.13	5436	--	1398.2

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	23	57	3.5	5.4	36	.52	8.4	50	1.1
2	43	63	7.3	5.7	34	.52	52	98	16
3	57	66	10	9.1	32	.79	123	82	27
4	57	65	10	6.8	30	.55	125	82	28
5	52	63	8.8	5.4	29	.42	78	63	13
6	48	60	7.8	25	51	4.2	50	70	9.5
7	28	57	4.3	62	103	17	32	95	8.2
8	22	52	3.1	194	88	46	22	105	6.2
9	18	46	2.2	257	98	68	16	107	4.6
10	19	49	2.5	149	72	29	9.8	99	2.6
11	15	57	2.3	87	60	14	6.0	84	1.4
12	13	67	2.4	94	66	17	5.4	67	.98
13	18	78	3.8	98	83	22	7.1	51	.98
14	43	65	7.5	64	66	11	11	55	1.6
15	36	55	5.3	47	63	8.0	8.7	68	1.6
16	32	52	4.5	34	63	5.8	5.2	80	1.1
17	27	53	3.9	28	65	4.9	3.5	91	.86
18	25	57	3.8	21	70	4.0	2.5	96	.65
19	16	62	2.7	16	78	3.4	2.0	98	.53
20	13	68	2.4	21	86	4.9	2.0	98	.53
21	13	74	2.6	16	85	3.7	2.5	95	.64
22	13	77	2.7	12	76	2.5	2.4	87	.56
23	9.8	77	2.0	8.0	63	1.4	1.5	75	.30
24	9.5	75	1.9	6.5	48	.84	1.1	62	.18
25	7.7	73	1.5	34	90	8.5	2.7	58	.42
26	6.5	69	1.2	45	97	12	431	646	752
27	6.2	63	1.1	35	77	7.3	556	229	365
28	8.0	54	1.2	24	58	3.8	246	173	115
29	7.4	39	.78	18	51	2.5	111	178	53
30	6.2	38	.64	14	50	1.9	54	145	21
31	--	--	--	10	50	1.4	--	--	--
TOTAL	692.3	--	113.72	1451.9	--	307.84	1977.8	--	1434.53

03261950 LORAMIE CREEK NEAR NEWPORT, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	28	122	9.2	3.5	102	.96	1.3	63	.22
2	17	105	4.8	2.2	105	.62	2.8	61	.46
3	11	96	2.9	1.7	109	.50	6.8	57	1.0
4	6.2	91	1.5	1.4	104	.39	7.1	38	.73
5	4.1	87	.96	1.4	94	.36	14	32	1.2
6	3.1	84	.70	1.2	85	.28	36	32	3.1
7	2.7	82	.60	1.0	77	.21	102	98	27
8	2.0	80	.43	.94	68	.17	40	104	11
9	1.8	78	.38	.86	59	.14	13	49	1.7
10	2.1	76	.43	.88	50	.12	6.0	16	.26
11	5.0	83	1.1	2.6	76	.53	3.5	15	.14
12	6.8	79	1.5	2.8	90	.68	5.7	17	.26
13	4.5	76	.92	1.6	90	.39	7.4	22	.44
14	3.3	78	.69	1.4	91	.34	4.8	36	.47
15	2.4	88	.57	1.3	92	.32	2.8	55	.42
16	2.0	92	.50	1.1	92	.27	2.0	63	.34
17	1.8	89	.43	.94	93	.24	1.5	59	.24
18	2.2	86	.51	.86	94	.22	1.2	49	.16
19	2.1	83	.47	.88	76	.18	1.0	39	.11
20	2.2	78	.46	14	87	3.6	29	60	5.8
21	2.4	68	.44	7.4	48	.96	111	166	50
22	2.4	59	.38	3.9	42	.44	43	108	13
23	2.4	52	.34	2.4	45	.29	15	66	2.7
24	13	65	2.5	2.4	48	.31	9.1	55	1.4
25	18	81	3.9	2.0	52	.28	6.2	60	1.0
26	16	78	3.4	1.8	55	.27	46	71	8.8
27	16	79	3.4	1.8	58	.28	96	94	24
28	10	82	2.2	1.6	60	.26	61	103	17
29	7.4	85	1.7	1.4	65	.25	36	80	7.8
30	6.0	90	1.5	1.1	67	.20	20	58	3.1
31	6.2	97	1.6	1.1	66	.20	--	--	--
TOTAL	210.1	--	50.41	69.50	--	14.26	731.2	--	183.85

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 25165.12
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 9153.62

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

						PARTICLE SIZE										
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
FEB. 20,1971	0810	2.0	1370	400	1480	67	73	83	89	93	96	98	100	--	--	--
JUNE 26.....	1910	26.0	715	872	1680	78	78	89	95	97	99	99	100	--	--	--
SEPT. 7.....	1345	22.0	114	125	38	86	95	97	98	99	99	100	--	--	--	--

03263110 GREAT MIAMI RIVER NEAR TAYLORSVILLE DAM, AT TAYLORSVILLE, OHIO

LOCATION.--Lat 39°52'00", long 84°10'02", Montgomery County, at interstate highway 70 bridge, 0.2 mile north of Taylorsville, 0.5 mile downstream from gaging station, and 0.7 mile downstream from Taylorsville Dam.

DRAINAGE AREA.--1,149 sq mi (at gaging station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRITE (NO2) (MG/L)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)
OCT.											
07...	0917	66	318	0	84	76	--	.15	.24	7.3	4.5
14...	1105	120	292	0	83	46	.6	.40	.92	8.6	4.8
21...	0945	111	312	0	78	44	--	.35	.64	13	4.2
28...	0935	87	326	0	84	52	--	.35	.43	12	5.6
NOV.											
11...	1015	105	326	0	78	47	--	.45	.62	12	6.0
DEC.											
16...	1110	228	318	0	95	38	--	.15	.23	8.7	2.1
JAN.											
13...	1040	234	298	0	100	38	--	.20	.55	21	3.1
FEB.											
24...	0945	5490	106	0	38	16	--	.12	.22	15	.52
MAR.											
31...	0910	545	270	0	88	34	--	.16	.18	21	1.1
APR.											
28...	0915	284	282	8	94	34	--	.28	.00	7.7	2.3
MAY											
26...	1025	418	280	0	83	32	--	.34	.37	12	1.7
JUNE											
30...	1025	1020	226	0	64	22	--	.51	.15	30	1.4
JULY											
07...	0950	304	292	0	79	26	--	.11	.10	20	2.2
14...	1335	343	272	12	82	32	--	.14	.04	5.7	1.2
21...	1015	160	290	0	82	34	--	.24	.03	6.7	2.6
28...	0900	245	258	0	73	32	--	.13	.04	4.3	2.3
AUG.											
04...	1130	166	256	0	71	38	--	.22	.10	8.7	3.0
11...	0955	108	294	6	73	46	.7	.15	.08	5.7	3.7
18...	1100	90	310	0	76	50	--	.16	.08	7.7	4.2
25...	1030	100	258	0	71	44	--	.23	.07	11	4.5
SEP.											
01...	1030	98	298	0	69	53	--	.26	.07	7.3	4.1
08...	1105	150	254	0	64	36	--	.33	.19	12	.45
15...	1040	98	302	0	75	52	--	.20	.04	9.7	3.8
22...	1045	138	292	0	74	54	--	.28	.14	10	4.4

DATE	TIME	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.										
14...	1105	150	44	3	100	5	10	0	.00	2
AUG.										
11...	0955	360	88	0	0	7	80	10	--	0

03263110 GREAT MIAMI RIVER NEAR TAYLORSVILLE DAM, AT TAYLORSVILLE, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: November 1961 to July 1963, July 1966 to September 1971.

REMARKS.--Samples for iron and manganese were filtered clear when collected. Samples were collected weekly October, July toSeptember, and monthly November to June. Records of discharge are given for 03263000 Great Miami River at Taylorsville, Ohio.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	ODOR (THRESHOLD NUMBER)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.										
07...	514	350	91	850	8.1	14.5	15	2	11.4	110
14...	454	320	80	754	8.0	17.5	8	2	7.3	76
21...	466	330	74	759	7.8	10.0	10	2	8.3	73
28...	498	360	92	809	8.1	15.5	10	2	7.2	71
NOV.										
11...	470	360	92	800	7.8	11.0	10	2	7.1	64
DEC.										
16...	484	370	110	768	8.0	1.5	4	2	12.2	87
JAN.										
13...	474	380	140	776	8.0	1.0	7	2	11.5	81
FEB.										
24...	204	150	63	322	7.6	1.5	95	2	12.6	90
MAR.										
31...	440	340	120	693	8.1	6.5	7	4	11.8	96
APR.										
28...	456	350	100	728	8.4	12.5	10	2	10.1	94
MAY										
26...	432	330	100	687	7.9	14.5	15	2	7.2	70
JUNE										
30...	364	280	94	546	7.6	23.5	40	2	6.6	77
JULY										
07...	428	330	90	662	7.9	24.0	20	4	8.1	95
14...	404	330	86	672	8.4	25.0	20	4	13.5	161
21...	398	320	82	676	8.2	21.0	15	2	11.3	134
28...	346	280	68	609	7.9	20.0	10	2	7.1	77
AUG.										
04...	352	290	78	645	7.9	18.0	15	2	6.5	68
11...	442	330	78	726	8.3	24.5	20	2	8.4	100
18...	446	340	86	736	8.2	23.0	20	2	9.5	109
25...	392	290	78	667	7.9	22.5	10	2	8.6	98
SEP.										
01...	442	310	66	730	8.1	23.0	20	2	10.8	120
08...	378	270	62	616	7.8	23.5	25	2	6.6	77
15...	432	320	72	747	7.7	20.0	20	2	8.6	93
22...	450	310	70	738	8.0	16.5	15	2	8.8	90

03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO

LOCATION.--Lat 40°03'28", long 84°21'22", in SW 1/4 sec.18, T.7 N., R.5 E., Miami County, at gaging station on left bank at downstream side of bridge on Laurer Road, 0.8 mile northwest of Pleasant Hill, 2 miles downstream from Painter Creek, and 2 miles upstream from Canyon Run.

DRAINAGE AREA.--503 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1965-68, 1970-71 (partial-record station).
Water temperatures: October 1964 to September 1966.
Sediment records: October 1963 to September 1971.

EXTREMES.--1970-71:
Sediment concentrations: Maximum daily, 1,970 mg/l June 26; minimum daily, 5 mg/l on several days during November and December.
Sediment discharges: Maximum daily, 10,700 tons June 26; minimum daily, 0.62 ton Nov. 28.

Period of record:
Sediment concentrations: Maximum daily, 1,970 mg/l June 26, 1971; minimum daily, 1 mg/l on several days during January 1966.
Sediment discharges: Maximum daily, 21,400 tons Apr. 21, 1964; minimum daily, 0.07 ton Aug. 21, 1965.

REMARKS.--Chemical data for this station on page 369. Flow affected by ice Jan. 6 to Feb. 1, Feb. 4, 5, 7-12, 14-16, 18.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	31	26	2.2	40	19	2.1	50	5	.68
2	27	26	1.9	44	19	2.3	48	5	.65
3	28	26	2.0	48	18	2.3	50	5	.68
4	23	26	1.6	45	18	2.2	55	5	.74
5	22	26	1.5	43	17	2.0	75	5	1.0
6	23	25	1.6	43	16	1.9	65	5	.88
7	24	25	1.6	43	16	1.9	60	5	.81
8	26	25	1.8	42	15	1.7	56	5	.76
9	25	25	1.7	42	15	1.7	54	5	.73
10	29	24	1.9	44	14	1.7	52	5	.70
11	30	24	1.9	45	14	1.7	50	5	.68
12	37	24	2.4	46	13	1.6	54	5	.73
13	54	24	3.5	48	12	1.6	80	14	3.0
14	70	23	4.3	50	12	1.6	138	19	7.1
15	62	23	3.9	50	11	1.5	107	15	4.3
16	50	23	3.1	52	10	1.4	92	13	3.2
17	47	23	2.9	52	10	1.4	98	11	2.9
18	45	23	2.8	52	9	1.3	100	9	2.4
19	43	22	2.6	50	8	1.1	98	7	1.9
20	46	22	2.7	60	8	1.3	105	6	1.7
21	50	22	3.0	70	7	1.3	100	5	1.4
22	54	22	3.2	65	6	1.1	141	12	4.6
23	50	21	2.8	58	6	.94	240	44	29
24	48	21	2.7	52	6	.84	213	35	20
25	46	21	2.6	48	6	.78	138	29	11
26	42	21	2.4	46	6	.75	110	27	8.0
27	42	20	2.3	48	6	.78	100	25	6.8
28	40	20	2.2	46	5	.62	90	23	5.6
29	40	20	2.2	48	5	.65	80	22	4.8
30	39	20	2.1	50	5	.68	75	20	4.1
31	39	20	2.1	--	--	--	70	18	3.4
TOTAL	1232	--	75.5	1470	--	42.74	2844	--	134.24

03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	66	17	3.0	44	15	1.8	733	36	71
2	64	17	2.9	41	15	1.7	604	25	41
3	66	18	3.2	40	15	1.6	520	23	32
4	604	207	450	700	110	208	410	22	24
5	1100	259	833	3200	415	3590	327	21	19
6	430	87	101	1700	249	1200	327	25	22
7	200	43	23	400	138	149	646	50	87
8	180	30	15	180	68	33	562	30	46
9	160	25	11	140	43	16	385	23	24
10	140	23	8.7	120	32	10	360	21	20
11	130	20	7.0	120	26	8.4	380	18	18
12	120	18	5.8	150	75	52	670	26	62
13	110	17	5.0	1000	165	446	2110	183	1060
14	140	17	6.4	400	67	72	1480	74	296
15	180	16	7.8	230	39	24	1650	153	804
16	130	16	5.6	190	33	17	1720	244	1130
17	110	16	4.8	1190	134	730	929	72	181
18	85	16	3.7	3400	257	2360	652	58	102
19	80	15	3.2	3010	235	1910	625	54	91
20	80	15	3.2	4870	677	8900	710	50	96
21	85	15	3.4	2000	253	1520	568	48	74
22	80	15	3.2	4630	495	7280	478	45	58
23	75	15	3.0	4920	315	4390	416	43	48
24	70	15	2.8	1450	127	497	353	40	38
25	65	15	2.6	803	69	150	311	38	32
26	60	15	2.4	1410	101	446	288	36	28
27	50	15	2.0	2480	191	1280	268	33	24
28	60	15	2.4	1220	70	231	249	32	22
29	56	15	2.3	--	--	--	235	31	20
30	52	15	2.1	--	--	--	205	30	17
31	48	15	1.9	--	--	--	183	30	15
TOTAL	4876	--	1531.4	40038	--	35524.5	19354	--	4602

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	182	29	14	87	19	4.5	114	33	10
2	212	28	16	83	19	4.3	139	31	12
3	214	28	16	84	19	4.3	253	38	26
4	189	26	13	89	19	4.6	192	27	14
5	168	25	11	84	19	4.3	146	20	7.9
6	160	25	11	123	22	7.3	124	18	6.0
7	160	24	10	187	28	14	117	17	5.4
8	154	24	10	778	62	148	121	16	5.2
9	144	23	8.9	990	69	196	117	16	5.1
10	136	23	8.4	543	26	38	97	16	4.2
11	123	23	7.6	412	20	22	87	16	3.8
12	119	22	7.1	1030	143	441	84	16	3.6
13	127	22	7.5	897	68	165	84	16	3.6
14	142	21	8.1	541	41	60	83	16	3.6
15	134	21	7.6	378	38	39	84	16	3.6
16	125	21	7.1	306	35	29	73	16	3.2
17	126	21	7.1	262	32	23	64	16	2.8
18	119	21	6.7	266	30	22	58	15	2.3
19	111	21	6.3	223	28	17	54	15	2.2
20	104	21	5.9	198	27	14	66	15	2.7
21	107	20	5.8	173	25	12	92	15	3.7
22	111	20	6.0	149	23	9.3	90	15	3.6
23	107	20	5.8	136	22	8.1	78	15	3.2
24	100	20	5.4	133	20	7.2	69	15	2.8
25	97	20	5.2	221	37	35	65	15	2.6
26	93	19	4.8	477	139	201	1680	1970	10700
27	87	19	4.5	262	80	57	1090	913	3190
28	93	19	4.8	190	72	37	352	174	165
29	94	19	4.8	156	51	21	192	86	45
30	89	19	4.6	137	44	16	134	85	31
31	--	--	--	123	38	13	--	--	--
TOTAL	3927	--	241.0	9718	--	1673.9	5999	--	14274.1

03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	126	84	29	45	46	5.6	24	20	1.3
2	179	83	40	39	45	4.7	25	20	1.4
3	151	82	33	36	44	4.3	31	19	1.6
4	98	81	21	40	43	4.6	38	19	1.9
5	77	80	17	36	42	4.1	42	19	2.2
6	69	80	15	41	40	4.4	43	19	2.2
7	65	79	14	49	39	5.2	76	19	3.9
8	60	78	13	32	37	3.2	111	19	5.7
9	54	77	11	15	36	1.5	72	19	3.7
10	60	76	12	17	35	1.6	49	19	2.5
11	96	76	20	29	33	2.6	38	19	1.9
12	78	75	16	31	33	2.8	34	19	1.7
13	64	74	13	35	32	3.0	32	19	1.6
14	56	73	11	50	32	4.3	31	19	1.6
15	47	72	9.1	40	31	3.3	34	19	1.7
16	40	70	7.6	18	31	1.5	34	19	1.7
17	40	69	7.5	10	30	.81	36	19	1.8
18	39	68	7.2	15	30	1.2	30	19	1.5
19	42	66	7.5	21	28	1.6	30	19	1.5
20	41	65	7.2	27	27	2.0	53	25	3.6
21	42	64	7.3	31	26	2.2	161	39	20
22	38	62	6.4	36	24	2.3	158	38	16
23	34	60	5.5	32	23	2.0	87	26	6.1
24	72	57	11	26	22	1.5	61	23	3.8
25	99	55	15	28	21	1.6	53	21	3.0
26	72	54	10	26	21	1.5	70	22	4.2
27	83	53	12	27	20	1.5	145	30	12
28	76	52	11	26	20	1.4	139	22	8.3
29	77	50	10	24	20	1.3	87	20	4.7
30	64	49	8.5	23	20	1.2	66	20	3.6
31	53	48	6.9	22	20	1.2	--	--	--
TOTAL	2192	--	414.7	927	--	80.01	1890	--	126.7

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	94467
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	58720.79

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	WATER TEMP-ERA-TURE (°C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
						.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
FEB. 5, 1971	1640	.0	3250	435	3820	64	76	88	93	98	98	99	100	--	--	--
MAR. 16.....	1640	5.0	1550	207	866	75	86	92	96	99	99	100	--	--	--	--
JUNE 26.....	0815	19.0	1710	2950	13600	55	74	86	97	100	--	--	--	--	--	--

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03266000 STILLWATER RIVER AT ENGLEWOOD, OHIO

LOCATION.--Lat 39°52'10", long 84°16'57", in NW 1/4 sec.23, T.5 N., R.5 E., Montgomery County, about 0.8 mile downstream from gaging station, at bridge on Interstate Highway 70, about 1 mile downstream from Englewood Dam, and 1.8 miles southeast of Englewood.

DRAINAGE AREA.--650 sq mi (at gaging station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRITE (NO2) (MG/L)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)
OCT.											
07...	0900	31	302	14	63	44	--	.10	.41	1.1	2.5
14...	1040	80	300	0	59	31	.5	.15	.38	3.8	2.5
21...	0915	61	316	0	65	36	--	.15	.31	4.8	1.8
28...	0920	49	312	0	67	30	--	.10	.31	4.7	1.8
NOV.											
11...	1030	56	336	0	73	30	--	.05	.44	3.2	3.4
DEC.											
16...	1140	137	320	6	88	30	--	.05	.05	4.0	1.5
JAN.											
13...	1110	164	306	0	100	32	--	.14	.16	27	1.1
FEB.											
24...	0930	4930	86	0	22	12	--	.10	.35	20	1.6
MAR.											
31...	0945	260	274	0	79	32	--	.11	.06	24	.48
APR.											
28...	0940	140	288	0	77	30	--	.11	.00	3.3	1.1
MAY											
26...	1050	576	288	0	72	28	--	.20	.09	15	.76
JUNE											
30...	1055	195	184	0	54	20	--	.88	.21	59	2.1
JULY											
07...	1015	82	274	0	80	26	--	.20	.41	18	1.6
14...	1320	74	276	0	64	32	--	.15	.06	3.3	.76
21...	1045	48	270	0	69	32	--	.39	.09	6.7	1.9
28...	0920	86	260	0	68	32	--	.17	.20	2.3	1.4
AUG.											
04...	1200	72	276	0	58	36	--	.16	.04	3.7	1.5
11...	0925	35	284	0	61	36	.6	.20	.25	2.1	2.1
18...	1130	27	302	0	64	40	--	.20	.12	1.7	2.3
25...	1055	34	296	0	60	41	--	.17	.36	1.4	2.6
SEP.											
01...	1100	26	324	0	66	46	--	.44	.52	1.4	3.1
08...	1050	66	304	0	67	40	--	.26	.14	1.5	1.9
15...	1010	35	318	0	66	46	--	.19	.15	3.3	2.1
22...	1115	200	284	0	65	34	--	.15	.11	3.4	1.7

DATE	TIME	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.										
14...	1040	490	80	12	33	4	0	0	.00	2
AUG.										
11...	0925	460	110	0	3	5	30	10	--	0

03266000 STILLWATER RIVER AT ENGLEWOOD, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: Water years 1962-63 (partial-record station), July 1966 to September 1971.

REMARKS.--Samples for iron and manganese were filtered clear when collected. Samples were collected weekly October, July to September, and monthly November to June.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	ODOR (THRESHOLD NUMBER)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.										
07...	410	330	62	706	8.4	13.5	30	4	9.1	87
14...	378	310	64	654	8.1	16.0	30	2	6.8	68
21...	398	330	70	684	8.2	11.0	25	2	9.6	86
28...	394	330	74	673	8.1	15.0	25	2	7.3	72
NOV.										
11...	420	360	84	732	8.0	10.5	15	0	9.3	83
DEC.										
16...	450	380	110	741	8.3	1.0	3	0	13.2	93
JAN.										
13...	466	390	140	766	8.1	.0	5	0	13.4	92
FEB.										
24...	156	120	50	262	7.4	1.5	120	0	13.7	98
MAR.										
31...	408	340	120	668	8.2	7.5	7	0	12.4	103
APR.										
28...	388	330	94	662	8.2	12.5	20	2	11.4	110
MAY										
26...	408	330	94	654	8.1	15.0	15	0	7.9	77
JUNE										
30...	342	260	110	516	7.4	25.5	100	2	6.1	73
JULY										
07...	400	310	85	641	8.0	24.0	35	4	9.2	110
14...	368	300	74	619	8.1	25.5	35	4	13.8	166
21...	356	280	58	621	7.8	21.0	35	0	6.1	72
28...	340	280	66	609	7.8	20.5	10	2	6.3	69
AUG.										
04...	348	290	64	627	7.9	17.5	30	2	6.5	68
11...	378	290	57	633	8.2	24.5	25	2	4.6	55
18...	400	310	62	675	8.1	23.0	40	2	6.5	75
25...	382	310	67	659	8.0	22.0	25	2	4.8	54
SEP.										
01...	418	320	54	713	8.2	22.5	25	0	3.9	44
08...	388	310	60	673	8.0	24.0	30	2	6.3	74
15...	428	320	59	713	7.8	21.0	30	4	6.6	73
22...	396	290	57	637	8.1	17.0	35	2	9.0	93

No Tape

03268000 BUCK CREEK AT NEW MOOREFIELD, OHIO

LOCATION.--Lat 39°59'31", long 83°42'53", Clark County, on downstream side of bridge on Moorefield-Catawba Road, at New Moorefield, 1.7 miles downstream from gaging station on Buck Creek near New Moorefield, and 1.3 miles downstream from East Fork Buck Creek.

DRAINAGE AREA.--65.3 sq mi.

PERIOD OF RECORD.--Chemical analyses: July to September 1970 (partial-record station); November 1970 to September 1971.
Water temperatures: December 1970 to September 1971.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since December 1970. In addition to the continuous recorder, samples were collected on an approximate monthly basis. Discharges are computed from the combined discharges of 03267950 Buck Creek near New Moorefield, Ohio (drainage area 30.5 sq mi), and 03267960 East Fork Buck Creek near New Moorefield, Ohio (drainage area 28.7 sq mi).

CHEMICAL ANALYSES, NOVEMBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
NOV. 13...	1145	27	13	90	140	32	41	100	38	4.0	1.9	354
DEC. 18...	1430	38	13	110	200	100	100	82	39	4.4	1.6	286
FEB. 11...	1340	34	14	40	100	110	110	100	37	4.0	2.0	362
MAR. 16...	1330	79	10	100	220	22	33	100	36	4.4	1.6	332
APR. 28...	1300	32	9.8	130	160	58	78	94	34	4.4	1.5	338
JUNE 09...	1250	25	15	260	260	78	78	94	38	4.9	1.4	355
JULY 19...	1430	24	9.6	260	630	25	13	93	34	4.3	1.4	342
SEP. 03...	1415	8.8	9.5	70	480	64	100	94	38	4.5	1.6	358

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)
NOV. 13...	0	81	10	.1	16	431	400	120	717	7.9	11.5	5
DEC. 18...	0	98	12	.4	14	474	360	130	750	8.0	2.0	5
FEB. 11...	0	92	14	.3	10	472	400	100	743	8.0	3.5	3
MAR. 16...	0	96	16	.3	19	466	400	130	718	7.7	6.0	10
APR. 28...	0	86	10	.2	14	426	370	92	688	7.9	13.0	5
JUNE 09...	0	85	12	.3	12	437	390	98	699	7.9	16.0	1
JULY 19...	0	86	11	.4	13	426	370	90	681	7.6	20.0	5
SEP. 03...	0	81	12	.2	11	437	390	96	696	8.0	19.0	2

03268000 BUCK CREEK AT NEW MOOREFIELD, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), DECEMBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	660	656	---	---	---	---	752	725
2	---	---	---	---	660	645	---	---	---	---	754	744
3	---	---	---	---	652	645	---	---	710	650	769	740
4	---	---	---	---	---	---	---	---	650	283	751	742
5	---	---	---	---	---	---	---	---	484	248	749	742
6	---	---	---	---	---	---	---	---	695	484	745	511
7	---	---	---	---	---	---	---	---	---	---	683	524
8	---	---	---	---	---	---	604	602	---	---	734	663
9	---	---	---	---	---	---	602	600	---	---	758	669
10	---	---	---	---	---	---	600	596	---	---	742	713
11	---	---	---	---	---	---	596	594	741	720	756	731
12	---	---	---	---	---	---	598	592	728	355	741	484
13	---	---	---	---	---	---	596	580	641	355	676	517
14	---	---	---	---	656	656	580	525	674	639	728	676
15	---	---	---	---	662	652	587	558	716	641	733	656
16	---	---	---	---	658	633	606	587	705	659	717	687
17	---	---	---	---	673	645	628	585	722	206	---	---
18	---	---	---	---	675	665	613	596	415	244	---	---
19	---	---	---	---	671	664	634	613	457	263	---	---
20	---	---	---	---	668	622	654	634	498	263	---	---
21	---	---	---	---	661	645	634	587	645	498	---	---
22	---	---	---	---	670	620	589	586	646	231	---	---
23	---	---	---	---	679	670	594	578	646	414	---	---
24	---	---	---	---	---	---	589	580	704	624	---	---
25	---	---	---	---	---	---	592	578	726	688	---	---
26	---	---	---	---	---	---	592	569	699	537	---	---
27	---	---	---	---	---	---	574	571	691	588	---	---
28	---	---	---	---	---	---	---	---	731	691	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	741	206	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	699	650	698	682	728	293	689	671	---	---
2	---	---	695	677	700	678	705	535	691	673	---	---
3	---	---	695	679	706	694	727	701	675	645	---	---
4	---	---	692	682	706	693	730	703	673	653	---	---
5	---	---	690	684	706	691	721	699	689	668	---	---
6	---	---	692	654	704	685	721	685	689	666	---	---
7	---	---	693	634	696	676	712	678	686	664	---	---
8	---	---	670	515	696	678	708	676	682	660	---	---
9	---	---	697	669	685	608	710	646	680	658	---	---
10	---	---	700	693	687	668	708	685	682	658	---	---
11	---	---	698	676	688	666	692	678	677	645	---	---
12	---	---	686	668	685	670	701	667	677	653	---	---
13	---	---	687	684	690	633	701	667	675	655	---	---
14	---	---	691	685	687	643	700	666	673	655	---	---
15	---	---	691	684	685	661	699	666	673	655	---	---
16	---	---	691	678	716	660	657	665	671	657	654	630
17	---	---	689	678	714	685	693	668	671	650	649	627
18	---	---	692	678	710	681	699	668	668	636	649	632
19	707	693	692	674	707	676	657	673	639	623	652	628
20	704	691	679	672	707	674	691	668	632	422	647	581
21	700	689	687	674	701	654	689	666	632	547	650	586
22	696	684	683	672	699	668	688	664	619	587	658	641
23	692	680	690	672	658	667	688	666	654	619	665	641
24	691	680	699	667	699	668	666	577	639	627	661	638
25	699	678	684	651	694	565	684	636	---	---	654	615
26	690	678	688	684	635	228	700	626	---	---	650	625
27	683	669	690	681	730	635	689	648	---	---	659	638
28	685	669	692	688	743	728	697	648	---	---	655	637
29	678	669	693	686	734	703	689	647	---	---	659	621
30	697	670	695	686	736	716	693	675	---	---	633	615
31	---	---	693	684	---	---	693	673	---	---	---	---
MONTH	---	---	700	515	743	228	730	293	---	---	---	---
YEAR	769	206										

GREAT MIAMI RIVER BASIN

03268000 BUCK CREEK AT NEW MOOREFIELD, OHIO--Continued

TEMPERATURE (°C) OF WATER, DECEMBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	---	---	---	---	13.0	11.5	---	---	---	---	11.5	5.5
2	---	---	---	---	11.5	9.0	---	---	---	---	9.0	6.0
3	---	---	---	---	9.0	8.0	---	---	2.0	1.0	6.0	3.5
4	---	---	---	---	---	---	---	---	2.0	0.5	7.0	4.0
5	---	---	---	---	---	---	---	---	2.5	1.0	8.0	4.0
6	---	---	---	---	---	---	---	---	5.5	1.0	7.0	4.5
7	---	---	---	---	---	---	---	---	---	---	4.5	2.0
8	---	---	---	---	---	---	3.5	2.5	---	---	5.0	2.0
9	---	---	---	---	---	---	4.0	2.5	---	---	8.5	2.5
10	---	---	---	---	---	---	5.0	3.0	---	---	5.5	4.0
11	---	---	---	---	---	---	5.5	3.5	6.0	3.5	7.5	4.0
12	---	---	---	---	---	---	5.0	4.0	6.0	1.0	12.0	5.0
13	---	---	---	---	---	---	5.5	3.5	---	0.0	8.5	4.0
14	---	---	---	---	6.5	5.5	6.5	4.5	---	---	14.5	5.5
15	---	---	---	---	6.0	4.0	4.5	2.0	5.5	2.5	11.5	7.0
16	---	---	---	---	7.0	5.0	3.5	2.5	7.0	4.5	7.0	5.0
17	---	---	---	---	7.0	6.0	---	---	6.0	0.5	---	---
18	---	---	---	---	7.0	6.0	---	---	5.0	0.5	---	---
19	---	---	---	---	9.0	6.5	---	---	5.5	2.0	---	---
20	---	---	---	---	7.0	5.0	2.0	1.5	4.5	2.5	---	---
21	---	---	---	---	5.5	5.0	2.5	0.5	7.0	4.5	---	---
22	---	---	---	---	8.0	5.5	5.5	1.5	6.0	1.5	---	---
23	---	---	---	---	7.5	7.0	5.5	2.5	4.0	2.5	---	---
24	---	---	---	---	---	---	5.0	4.0	5.5	3.5	---	---
25	---	---	---	---	---	---	6.0	5.0	9.0	5.5	---	---
26	---	---	---	---	---	---	5.5	1.5	8.0	6.5	---	---
27	---	---	---	---	---	---	---	---	10.0	5.5	---	---
28	---	---	---	---	---	---	---	---	9.5	4.0	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	---	---	15.0	7.5	21.5	14.5	25.0	19.5	22.5	15.5	19.0	19.0
2	---	---	12.5	9.5	22.0	16.0	24.0	19.0	22.5	17.0	19.0	19.0
3	---	---	14.5	8.0	23.0	16.5	24.5	16.0	21.0	18.5	19.0	19.0
4	---	---	14.0	7.5	24.0	16.5	24.5	17.0	19.0	17.5	19.0	18.5
5	---	---	12.5	8.5	24.5	17.0	22.5	18.5	22.5	15.5	19.5	19.0
6	---	---	16.5	12.5	25.5	17.5	25.0	17.5	23.5	16.5	19.5	19.0
7	---	---	14.0	11.5	23.5	17.5	25.0	17.5	23.5	16.0	19.5	19.0
8	---	---	19.0	11.0	24.0	17.5	24.5	18.5	23.5	17.5	19.5	19.0
9	---	---	17.5	10.5	20.5	15.0	24.0	20.0	23.5	17.5	19.5	19.5
10	---	---	21.0	10.5	22.5	13.0	21.5	19.5	25.0	19.0	19.5	19.5
11	---	---	15.5	12.0	22.0	15.0	23.0	18.5	24.5	19.5	19.5	19.0
12	---	---	14.0	11.5	21.5	17.0	25.0	17.5	23.5	16.0	19.0	18.5
13	---	---	16.5	8.5	24.5	17.0	25.5	18.5	23.5	16.0	18.5	18.0
14	---	---	20.5	9.5	24.5	17.5	24.5	18.5	23.5	16.5	18.0	17.5
15	---	---	20.5	12.0	22.5	17.5	24.0	17.0	22.0	18.5	18.0	17.5
16	---	---	21.5	12.5	25.0	16.5	24.0	17.5	24.0	17.0	19.5	17.0
17	---	---	23.0	13.0	24.5	16.5	23.0	18.5	24.0	16.5	18.5	16.5
18	---	---	23.5	14.5	25.5	17.0	20.5	16.5	24.0	16.5	19.0	15.0
19	19.0	14.5	22.5	15.0	24.5	19.0	22.5	17.5	23.5	18.0	17.5	16.0
20	20.5	10.0	21.0	13.5	26.5	19.0	23.0	17.0	23.5	19.0	17.5	15.5
21	15.0	10.5	20.5	12.5	25.0	20.5	23.0	16.0	24.5	19.5	18.5	13.0
22	16.0	8.0	20.0	11.5	25.0	17.5	24.5	16.5	23.0	18.5	18.0	13.0
23	16.5	8.0	19.5	11.0	24.5	17.0	24.0	17.5	24.0	18.0	18.5	14.0
24	15.5	8.0	19.5	14.0	24.5	18.5	22.0	18.5	22.0	15.0	18.0	13.0
25	17.0	7.5	17.0	12.5	24.0	19.0	23.5	17.5	21.5	19.5	14.5	12.5
26	17.0	8.5	15.0	10.0	24.5	19.5	23.0	19.5	19.5	19.0	18.0	13.5
27	13.0	7.5	14.0	10.5	27.0	19.0	22.5	16.0	20.0	19.5	20.5	18.0
28	16.5	10.0	17.0	10.0	26.0	19.0	22.5	16.0	19.5	19.0	22.5	17.0
29	11.5	8.5	18.5	11.5	25.0	18.5	23.5	17.5	19.0	18.5	23.5	18.0
30	13.5	7.5	21.5	12.0	25.5	19.0	20.5	17.0	19.0	18.5	23.5	18.0
31	---	---	22.0	12.5	---	---	22.0	16.0	19.0	18.5	---	---
MONTH	---	---	23.5	7.5	27.0	13.0	25.5	16.0	25.0	15.0	23.5	12.5
YEAR	27.0	0.0										

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No Tape

03270000 MAD RIVER NEAR DAYTON, OHIO

LOCATION.--Lat 39°47'50", long 84°05'19", in SW 1/4 sec.7, R.8, T.2, Greene County, 900 ft downstream from gaging station, about 600 ft downstream from Huffman Dam, 2.5 miles downstream from Mud Run, and 6 miles northeast of Dayton.

DRAINAGE AREA.--635 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1948, water years 1962-63 (partial-record station), July 1966 to September 1971.
Water temperatures: October 1947 to September 1948, June 1968 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 954 micromhos Feb. 4; minimum, 165 micromhos June 26.
Dissolved oxygen: Maximum, 15.0 mg/l on many days during November to January; minimum, 2.4 mg/l June 4, 5.
Water temperatures: Maximum, 28.5°C June 20; minimum, freezing point Jan. 19-22, Feb. 4.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRITE (NO2) (MG/L)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)
OCT.											
07...	1015	211	338	0	80	34	--	.50	.10	14	2.5
14...	1206	285	276	0	64	21	.3	.25	.16	10	1.5
21...	1030	282	342	0	77	26	--	.60	.24	12	2.3
28...	1000	235	342	0	80	28	--	.30	.03	13	2.3
NOV.											
11...	1110	235	342	0	79	26	--	.30	.05	11	2.3
DEC.											
16...	1200	282	340	0	88	30	--	.20	.19	15	1.7
JAN.											
13...	1140	299	352	0	86	30	--	.21	.16	11	2.0
FEB.											
24...	1005	1480	232	0	63	28	--	.09	.21	18	.89
MAR.											
31...	1015	472	332	0	85	30	--	.20	.21	13	1.3
APR.											
28...	1010	380	320	0	81	24	--	.41	.01	9.4	1.7
MAY											
26...	1120	444	292	[illegible]	67	24	--	.52	.09	10	1.3
JUNE											
30...	1125	584	316	0	77	24	--	.49	.22	16	1.5
JULY											
07...	1040	336	326	6	81	26	--	.40	.14	15	1.7
14...	0845	292	332	0	81	28	--	.31	.08	10	1.5
21...	1115	260	332	0	82	30	--	.49	.08	12	1.5
28...	0950	244	318	0	72	26	--	.23	.13	13	1.7
AUG.											
04...	1245	292	324	0	75	28	--	.23	.04	9.4	1.7
11...	1055	235	322	0	78	29	.6	.26	.14	12	2.4
18...	1200	193	330	0	80	32	--	.34	.10	12	2.7
25...	1120	214	326	0	80	28	--	.28	.07	9.4	2.3
SEP.											
01...	1130	193	330	0	84	32	--	.86	.12	16	3.0
08...	1125	396	258	0	61	24	--	.31	.20	14	1.2
15...	1140	254	344	0	76	29	--	.24	.06	14	1.5
22...	1140	292	310	0	69	24	--	.22	.09	18	1.7

DATE	TIME	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.										
14...	1206	230	66	15	33	6	0	0	.00	2
AUG.										
11...	1055	260	44	0	3	19	40	10	--	0

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1968-69, 1970-71): Maximum, 1,210 micromhos Jan. 9, 1969; minimum, 165 micromhos June 26, 1971.
Dissolved oxygen (1970-71): Maximum, 15.0 mg/l on many days during November 1970 to January 1971; minimum, 2.4 mg/l June 4, 5, 1971.
Water temperatures (1947-48, 1968-69, 1970-71): Maximum, 28.5°C June 20, 1971; minimum, freezing point on several days during January and February of 1948 and 1971.

REMARKS.--Samples for iron and manganese filtered clear when collected. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Samples were collected weekly October, July to September, and monthly November to June. Special samples were also collected twice during the year to further define the quality of water. Continuous water-quality recorder operated since June 1968. Interruptions in the record were due to malfunctions of the instrument.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	TUR-BID-ITY (JTU)	ODOR (THRES-HOLD NUMBER)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.										
07...	476	380	100	746	8.0	19.0	15	8	7.9	86
14...	356	310	84	616	8.0	--	15	2	7.8	--
21...	450	380	100	726	8.0	11.5	10	2	9.5	86
28...	450	380	100	738	8.0	15.5	7	0	7.0	69
NOV.										
11...	438	380	100	749	7.9	12.0	10	2	9.3	86
DEC.										
16...	468	400	120	768	8.0	3.0	3	2	11.2	83
JAN.										
13...	442	390	100	768	8.0	3.0	8	0	10.6	78
FEB.										
24...	332	280	90	565	8.0	3.0	45	0	11.6	86
MAR.										
31...	456	380	110	740	8.1	8.0	4	2	12.3	103
APR.										
28...	412	360	98	705	7.9	12.0	15	2	8.4	78
MAY										
26...	388	310	70	631	8.0	14.0	10	2	7.6	73
JUNE										
30...	422	350	90	669	7.9	23.0	40	0	7.0	80
JULY										
07...	474	360	82	711	8.3	22.0	25	4	7.8	89
14...	438	360	88	710	8.0	21.0	10	4	6.9	77
21...	436	350	78	725	7.9	20.0	5	0	8.5	104
28...	398	340	79	686	7.9	19.5	20	4	7.4	80
AUG.										
04...	412	350	84	703	8.0	17.0	8	2	7.8	80
11...	432	360	96	706	8.2	23.5	7	4	6.1	71
18...	456	360	89	725	8.1	21.5	15	4	8.0	90
25...	454	350	82	707	7.9	21.5	10	4	7.1	80
SEP.										
01...	458	370	99	734	8.0	22.5	10	4	6.6	75
08...	344	280	68	571	7.7	22.0	50	2	7.3	83
15...	432	370	88	721	8.1	20.0	20	4	8.1	88
22...	420	320	66	663	8.0	16.0	20	4	9.2	92

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	763	739	763	727	778	742	---	---	---	---	678	636
2	810	717	760	574	775	754	772	745	---	---	702	678
3	811	724	745	709	787	760	781	742	822	804	735	687
4	777	720	748	715	778	718	808	502	954	444	807	699
5	772	715	760	736	757	682	598	538	495	231	756	729
6	765	678	763	736	760	739	709	586	471	252	867	690
7	769	700	781	751	772	745	757	706	612	459	741	597
8	776	707	775	742	790	745	781	745	681	564	648	600
9	801	708	772	736	787	757	778	760	678	630	711	648
10	805	721	760	727	787	757	778	760	---	---	861	696
11	756	711	763	733	805	754	775	751	---	---	837	699
12	736	631	763	742	787	628	769	748	---	---	738	663
13	713	575	769	739	739	640	898	757	---	---	675	561
14	672	594	784	739	751	688	808	742	---	---	633	573
15	728	672	763	724	778	739	772	715	---	---	678	627
16	773	701	748	706	790	748	769	721	---	---	627	603
17	784	748	748	712	754	718	778	736	---	---	675	624
18	784	724	757	727	757	715	856	733	---	---	702	675
19	804	738	763	736	787	757	847	766	---	---	711	672
20	802	736	778	718	787	766	778	760	---	---	690	660
21	759	723	751	694	784	769	804	760	---	---	735	687
22	742	697	754	706	775	592	792	768	---	---	720	696
23	760	727	769	715	724	643	792	753	459	327	705	690
24	772	736	769	739	757	721	804	756	600	459	717	672
25	769	733	787	757	763	736	858	753	657	600	708	696
26	766	733	790	760	772	748	---	---	699	627	714	702
27	763	724	808	778	781	760	---	---	627	549	711	669
28	772	742	787	763	775	757	---	---	636	564	708	600
29	781	745	814	760	781	751	---	---	---	---	687	585
30	799	736	778	742	784	754	---	---	---	---	696	612
31	754	706	---	---	784	757	---	---	---	---	696	630
MONTH	811	575	814	574	805	592	---	---	---	---	867	561

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	729	633	735	708	726	690	678	612	769	733	747	714
2	748	639	756	657	723	690	636	474	768	741	759	711
3	700	685	717	651	720	687	---	---	784	736	753	456
4	703	676	717	684	735	699	---	---	774	723	657	483
5	702	669	726	702	735	693	---	---	737	698	678	480
6	702	675	717	414	738	690	---	---	775	718	708	327
7	711	657	657	483	735	699	---	---	771	726	417	309
8	705	660	597	489	732	660	---	---	773	719	621	417
9	698	671	651	594	708	669	---	---	795	735	690	603
10	695	644	693	651	717	642	---	---	782	725	726	684
11	698	641	717	693	723	654	---	---	781	709	720	513
12	701	671	711	687	714	654	---	---	762	672	627	576
13	724	667	693	663	717	645	---	---	746	659	702	609
14	709	667	699	660	717	639	727	706	792	684	735	690
15	700	670	720	699	723	627	735	711	779	674	744	705
16	712	688	723	702	741	666	746	710	760	604	747	723
17	708	675	714	693	747	705	741	711	799	654	790	723
18	705	609	723	693	738	711	737	707	732	699	750	720
19	699	630	729	711	756	717	745	718	735	696	758	729
20	714	566	723	678	747	696	750	708	765	717	749	434
21	740	605	693	672	750	603	743	716	732	693	638	461
22	704	608	717	693	708	660	748	700	690	576	719	602
23	728	656	711	696	714	642	767	719	645	558	760	709
24	731	614	741	705	735	696	748	442	687	570	769	733
25	718	613	720	603	747	702	594	486	732	669	760	649
26	712	400	684	582	732	165	701	594	747	708	754	658
27	787	256	726	684	528	243	721	670	747	696	706	661
28	706	652	723	696	603	480	752	611	741	714	744	696
29	723	636	735	705	660	540	742	655	738	699	771	729
30	726	714	729	702	675	567	711	630	738	696	780	732
31	---	---	723	693	---	---	797	711	747	696	---	---
MONTH	787	256	756	414	756	165	---	---	795	558	790	309
YEAR	954	165										

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.1	7.4	---	---	---	---	---	---	---	---	8.6	8.4
2	8.3	7.6	---	---	---	---	---	---	---	---	8.7	8.6
3	9.6	7.8	---	---	---	---	---	---	8.2	7.9	8.7	8.6
4	8.7	7.9	---	---	---	---	---	---	---	---	8.6	8.6
5	8.5	7.8	---	---	---	---	---	---	---	---	8.6	8.6
6	8.6	7.8	---	---	---	---	---	---	---	---	8.7	8.6
7	8.3	7.7	---	---	---	---	---	---	---	---	8.7	8.6
8	8.4	7.6	---	---	---	---	---	---	---	---	8.7	8.6
9	8.3	7.6	---	---	---	---	---	---	---	---	8.6	8.6
10	8.4	7.6	---	---	---	---	---	---	---	---	8.6	8.6
11	8.0	7.6	---	---	---	---	---	---	---	---	8.7	8.6
12	7.7	7.3	---	---	---	---	---	---	---	---	8.9	8.7
13	7.3	6.5	---	---	---	---	---	---	---	---	8.9	8.8
14	7.2	6.7	---	---	---	---	---	---	---	---	9.0	8.9
15	7.7	7.2	---	---	---	---	---	---	---	---	9.0	8.9
16	8.3	7.6	---	---	---	---	---	---	---	---	8.9	8.8
17	8.3	7.8	---	---	---	---	---	---	---	---	8.9	8.8
18	8.4	7.8	---	---	---	---	---	---	---	---	8.9	8.8
19	8.2	7.8	---	---	---	---	---	---	---	---	8.9	8.8
20	7.9	7.5	---	---	---	---	---	---	---	---	8.9	8.7
21	7.7	7.3	---	---	---	---	8.2	7.7	---	---	8.9	8.8
22	7.5	7.5	---	---	---	---	8.1	7.4	---	---	8.9	8.8
23	---	---	---	---	---	---	8.2	7.4	7.8	7.6	8.9	8.7
24	---	---	---	---	---	---	7.9	7.4	7.9	7.6	8.9	8.7
25	---	---	---	---	---	---	8.1	7.2	7.6	6.8	8.9	8.7
26	---	---	---	---	---	---	---	---	6.8	5.6	8.9	8.6
27	---	---	---	---	---	---	---	---	5.6	5.0	8.9	8.6
28	---	---	---	---	---	---	---	---	8.4	4.8	9.0	8.5
29	---	---	---	---	---	---	---	---	---	---	9.0	8.6
30	---	---	---	---	---	---	---	---	---	---	9.0	8.5
31	---	---	---	---	---	---	---	---	---	---	9.0	8.5
MONTH	---	---	---	---	---	---	---	---	---	---	9.0	8.4

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.7	8.5	8.1	7.7	8.1	7.4	8.4	8.2	8.5	8.1	8.2	7.8
2	8.5	7.6	8.0	7.7	8.5	7.5	8.2	8.0	8.5	8.1	8.2	7.8
3	8.0	6.7	8.0	7.7	8.4	7.8	8.3	8.0	8.6	8.2	8.3	8.1
4	6.7	5.8	8.0	7.6	8.4	7.8	---	---	8.9	8.5	8.3	8.1
5	5.8	5.4	8.0	7.7	8.4	7.9	---	---	9.0	8.5	8.4	7.9
6	5.7	5.1	8.4	8.0	8.4	7.8	---	---	8.7	8.1	8.2	7.9
7	5.4	4.8	8.2	7.9	8.4	7.8	---	---	8.4	7.9	8.4	8.1
8	6.2	4.4	8.4	8.2	8.5	7.5	---	---	8.4	7.9	8.5	8.1
9	7.8	6.2	8.3	8.1	8.5	7.5	---	---	8.2	7.8	8.4	7.9
10	8.0	7.4	8.3	7.9	8.6	7.9	---	---	8.3	7.9	8.2	7.9
11	8.1	7.5	8.0	7.6	8.4	7.5	---	---	8.2	7.8	8.4	7.9
12	8.2	7.5	8.5	8.0	8.3	7.8	---	---	8.2	7.7	8.7	8.4
13	8.3	7.4	8.1	7.8	8.5	7.5	---	---	8.1	7.6	8.8	8.6
14	7.6	7.1	7.9	7.5	8.3	7.8	8.3	7.5	8.1	7.6	8.9	8.4
15	7.8	7.1	7.5	6.9	8.5	7.8	8.3	7.8	8.2	7.5	8.7	8.0
16	7.9	7.2	7.3	6.7	8.8	7.8	8.4	7.8	8.3	7.9	8.0	7.5
17	8.7	7.4	7.6	6.6	8.6	8.0	8.3	7.8	8.2	7.6	8.1	7.6
18	8.0	7.3	7.2	6.5	8.5	7.5	8.4	7.8	8.2	7.9	8.3	7.9
19	8.0	7.3	8.6	8.1	8.7	7.8	8.5	8.1	8.1	7.6	8.5	8.1
20	8.0	7.5	8.5	7.9	8.6	8.0	8.6	8.0	8.1	7.6	8.6	8.4
21	7.7	7.2	8.4	7.7	8.5	7.9	8.4	7.5	8.1	7.7	8.7	8.5
22	7.4	6.7	8.3	7.6	8.5	7.9	8.4	7.8	8.1	7.6	9.0	8.7
23	7.4	6.8	8.3	7.6	8.4	7.6	8.2	7.7	8.1	7.6	8.8	8.4
24	7.4	6.9	8.0	7.4	8.4	7.8	8.4	7.8	8.1	7.5	8.9	8.4
25	7.4	6.8	7.7	7.3	8.8	7.8	8.5	8.0	8.0	7.5	9.0	8.4
26	7.6	7.2	7.8	7.2	8.1	7.7	8.4	8.0	8.2	7.9	9.1	8.9
27	7.4	7.0	7.9	7.3	8.2	7.3	8.4	7.8	8.2	7.9	9.0	8.6
28	7.6	7.0	7.8	7.1	8.2	7.5	8.3	7.8	8.3	7.9	8.8	8.1
29	7.5	7.4	7.9	7.2	8.3	8.1	8.5	7.5	8.3	8.0	8.4	7.9
30	8.1	7.4	8.1	7.3	8.3	8.1	8.4	7.8	8.2	7.8	8.3	7.6
31	---	---	8.2	7.3	---	---	8.5	8.2	8.2	7.7	---	---
MONTH	8.7	4.4	8.6	6.5	8.8	7.4	---	---	9.0	7.5	9.1	7.5

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.3	6.3	11.3	7.0	12.4	9.5	---	---	---	---	11.2	10.7
2	9.9	6.2	8.4	7.4	14.3	9.4	15.0	13.2	---	---	10.7	10.4
3	10.3	6.0	9.9	7.5	12.2	10.3	15.0	13.4	13.4	10.6	11.4	10.8
4	11.2	6.5	10.3	7.3	12.8	10.1	13.8	12.1	12.1	11.1	11.7	11.4
5	10.3	6.8	10.2	7.5	13.6	10.6	13.5	12.9	12.3	9.6	11.7	11.1
6	13.2	7.5	10.9	7.5	15.0	11.7	14.8	13.6	12.5	8.4	11.2	10.6
7	12.0	7.2	10.6	7.3	15.0	12.7	15.0	14.1	12.4	9.2	12.3	10.8
8	12.3	6.9	10.8	7.4	15.0	12.5	15.0	14.1	12.8	11.6	12.6	12.3
9	11.8	6.6	10.7	7.2	15.0	11.8	14.9	13.8	12.9	11.5	12.4	11.6
10	12.1	6.8	9.2	7.0	15.0	11.3	15.0	13.3	---	---	11.6	11.2
11	11.8	7.1	10.0	6.6	12.8	11.0	14.4	13.1	---	---	11.5	11.0
12	8.3	7.1	10.1	6.6	11.6	10.5	13.9	12.6	---	---	11.3	10.8
13	7.3	6.4	12.4	6.5	12.7	10.5	13.3	12.2	---	---	11.3	10.6
14	8.4	6.4	11.7	8.8	15.0	11.8	12.9	11.7	---	---	11.2	5.4
15	8.6	6.6	13.7	9.8	15.0	12.8	14.2	11.9	---	---	10.2	9.4
16	11.3	7.8	14.6	10.7	13.3	12.3	15.0	12.9	---	---	11.0	9.7
17	11.7	8.3	14.8	11.6	12.5	11.9	15.0	13.2	---	---	12.1	10.7
18	12.0	8.4	14.7	10.8	14.3	11.8	15.0	13.6	---	---	12.1	11.4
19	12.1	6.7	14.3	10.7	13.0	11.8	15.0	13.9	---	---	11.4	10.8
20	9.2	7.8	11.6	10.0	15.0	11.7	15.0	14.2	---	---	12.9	10.9
21	9.0	7.0	13.8	10.3	13.9	12.1	15.0	13.6	---	---	12.9	11.5
22	10.9	7.1	13.2	10.7	12.8	11.7	15.0	12.8	---	---	12.2	11.4
23	12.1	7.1	15.0	12.1	12.6	11.7	15.0	11.9	12.2	11.7	13.0	11.3
24	11.9	6.9	15.0	13.0	14.8	12.1	14.7	11.7	11.7	11.3	13.4	11.7
25	12.8	7.0	15.0	12.9	14.9	13.3	15.0	11.1	11.3	10.9	13.6	11.6
26	12.0	6.9	13.8	12.3	15.0	13.9	---	---	10.9	10.5	14.6	11.7
27	12.5	7.0	13.8	10.9	15.0	14.0	---	---	11.1	10.6	14.6	11.3
28	10.3	6.4	12.9	10.6	15.0	13.9	---	---	11.3	11.1	14.5	11.1
29	8.5	6.6	11.8	10.5	15.0	13.8	---	---	---	---	12.7	11.9
30	11.0	6.9	12.7	10.2	15.0	13.6	---	---	---	---	12.5	11.7
31	10.6	6.7	---	---	15.0	13.4	---	---	---	---	12.3	11.2
MONTH	13.2	6.0	15.0	6.5	15.0	9.4	---	---	---	---	14.6	5.4

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.6	11.1	11.1	8.0	12.3	5.4	4.4	3.8	9.7	5.8	9.5	6.4
2	12.8	11.6	10.7	7.4	9.0	4.4	4.4	4.1	9.3	5.8	7.9	5.9
3	13.4	11.6	11.1	7.7	8.3	2.6	4.5	4.3	8.1	5.8	7.0	6.0
4	13.5	11.8	11.6	7.5	6.6	2.4	---	---	8.1	5.8	8.0	5.4
5	13.9	11.7	10.1	7.4	6.2	2.4	---	---	9.3	6.1	8.7	5.5
6	14.2	12.1	8.7	7.1	6.1	2.5	---	---	9.6	6.0	7.9	5.8
7	13.9	11.7	6.9	6.9	5.8	2.6	---	---	9.9	5.8	7.0	6.5
8	13.3	11.1	8.9	8.3	6.2	3.1	---	---	10.0	6.0	7.0	5.9
9	12.4	10.6	9.2	8.0	6.0	3.4	---	---	9.7	6.0	7.3	5.8
10	13.0	10.6	9.7	7.6	6.5	3.7	---	---	9.3	5.8	7.3	5.5
11	12.7	10.7	8.8	7.3	6.2	4.0	---	---	8.7	5.2	6.3	5.5
12	12.0	10.0	9.3	7.2	5.7	3.9	---	---	9.3	5.5	7.0	5.7
13	11.0	9.3	10.4	8.1	6.3	4.1	---	---	9.5	5.6	7.3	6.3
14	12.8	8.6	10.4	7.9	6.1	4.4	9.0	6.1	9.5	5.2	7.8	6.2
15	13.1	9.8	10.3	7.2	6.7	4.6	9.1	4.7	9.0	5.2	7.8	6.1
16	12.9	9.8	10.6	6.5	7.9	4.9	9.3	4.7	9.7	5.8	7.7	6.2
17	11.7	9.1	10.9	6.0	8.1	3.0	9.6	4.9	9.8	6.0	8.1	5.9
18	12.8	8.9	10.9	5.6	8.2	3.0	9.4	5.0	9.2	6.6	8.8	6.1
19	12.8	10.0	10.4	5.1	6.3	2.6	9.0	5.2	9.2	5.1	7.9	5.9
20	12.4	9.4	10.4	5.2	7.7	3.0	9.9	5.4	8.6	4.8	7.5	6.2
21	10.6	9.2	11.4	5.6	6.7	2.5	10.3	5.2	8.7	4.7	7.8	6.1
22	12.0	9.8	12.4	6.1	7.3	2.7	10.9	5.1	7.6	4.8	9.2	6.8
23	12.2	9.9	12.9	6.3	7.4	2.6	10.6	5.0	8.2	4.4	9.0	6.7
24	11.9	9.7	10.5	5.5	7.1	2.5	6.7	4.9	9.8	5.4	9.8	6.7
25	11.4	8.8	8.2	6.1	6.6	2.6	8.0	5.0	8.5	5.9	9.5	7.0
26	11.0	9.2	11.4	6.3	5.1	3.6	7.9	5.3	9.1	6.0	9.3	6.8
27	10.6	8.1	11.5	7.1	4.7	4.3	8.3	5.7	9.0	5.8	10.1	6.4
28	10.4	6.9	12.3	7.3	4.3	4.2	8.6	5.7	9.2	6.3	11.0	6.6
29	10.5	9.9	12.4	6.5	4.2	4.1	8.5	5.1	9.6	6.5	10.8	6.5
30	11.2	9.2	13.2	6.1	4.2	3.9	7.7	5.3	9.9	6.6	11.4	6.5
31	---	---	13.1	5.9	---	---	8.9	5.7	10.2	6.5	---	---
MONTH	14.2	6.9	13.2	5.1	12.3	2.4	---	---	10.2	4.4	11.4	5.4
YEAR	15.0	2.4										

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	14.0	14.0	12.0	14.0	11.0	---	---	---	---	9.0	6.0
2	18.0	14.0	12.0	10.0	13.5	11.5	5.5	3.5	---	---	8.5	7.0
3	17.0	14.5	10.5	9.0	13.5	11.0	6.0	3.5	1.0	0.5	6.5	4.5
4	16.0	12.0	10.5	9.0	13.5	9.5	7.0	5.0	2.5	0.0	6.0	2.5
5	16.5	12.5	10.0	8.5	10.0	7.0	5.0	3.0	5.0	2.0	7.0	3.0
6	18.0	14.0	11.0	9.5	7.0	4.5	3.0	1.0	---	---	7.0	6.0
7	17.5	15.0	11.5	9.0	5.0	3.5	2.0	0.5	---	---	6.0	2.5
8	19.0	16.0	11.5	9.0	6.0	3.5	2.0	0.5	5.0	2.5	3.0	1.0
9	20.0	16.5	12.5	10.0	8.5	6.0	2.5	1.0	4.0	2.0	6.5	2.0
10	18.5	15.0	12.0	11.5	8.5	7.0	4.0	2.0	---	---	5.5	4.5
11	16.5	13.5	12.5	11.0	10.5	8.5	4.5	3.0	---	---	7.0	5.0
12	16.0	14.5	13.0	11.5	10.5	9.5	5.0	4.5	---	---	10.5	6.0
13	18.0	15.0	12.0	11.0	9.5	7.0	6.0	4.5	---	---	9.5	8.0
14	17.5	16.5	11.0	7.0	7.0	4.5	7.0	6.0	---	---	12.0	8.0
15	17.0	13.0	7.0	5.5	6.0	3.5	6.5	4.5	---	---	12.5	10.5
16	13.0	10.0	5.0	4.5	7.5	5.0	4.5	3.0	---	---	10.5	6.5
17	12.0	8.5	6.0	3.5	[illegible]	6.0	3.0	2.0	---	---	8.0	6.0
18	12.0	9.0	7.0	5.5	7.5	6.0	2.0	0.5	---	---	8.5	6.0
19	12.5	9.0	8.0	6.0	8.5	7.5	1.0	0.0	---	---	7.5	5.5
20	12.0	11.0	9.0	7.0	7.5	6.0	1.0	0.0	---	---	6.0	4.5
21	13.5	12.0	7.5	5.5	7.0	5.5	2.5	0.0	---	---	9.0	4.0
22	15.0	13.0	7.5	5.0	8.0	5.5	3.0	0.0	---	---	8.0	6.5
23	15.0	12.0	5.0	0.5	8.5	6.5	3.0	1.0	3.0	3.0	7.5	5.0
24	15.5	13.0	3.5	1.0	6.5	3.0	3.0	1.5	4.0	3.0	8.5	4.5
25	17.0	13.5	4.0	2.5	4.0	2.0	4.5	2.5	6.0	3.5	9.0	5.0
26	16.5	14.0	7.0	4.0	2.0	0.5	---	---	8.5	6.0	11.0	6.0
27	17.5	14.0	10.0	7.0	2.0	1.0	---	---	8.5	6.5	11.0	7.0
28	17.0	15.5	10.5	10.0	3.0	1.5	---	---	7.5	5.5	12.5	8.5
29	15.5	13.5	12.0	10.0	3.5	1.5	---	---	---	---	11.0	8.5
30	15.0	12.5	11.5	11.0	4.0	2.0	---	---	---	---	12.0	7.0
31	15.0	12.5	---	---	4.5	3.0	---	---	---	---	13.5	8.0
MONTH	20.0	8.5	14.0	0.5	14.0	0.5	---	---	---	---	13.5	1.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	11.0	16.0	11.0	23.0	19.5	26.0	22.5	24.0	19.0	25.0	21.5
2	11.5	8.5	14.5	12.0	24.0	20.0	25.0	21.5	23.5	20.5	24.0	22.5
3	12.5	9.5	15.0	10.5	25.0	20.5	25.5	20.5	22.5	21.5	22.5	21.5
4	13.0	8.5	14.0	10.0	27.0	22.0	---	---	21.5	20.5	24.0	21.5
5	10.5	8.5	14.0	11.5	27.5	23.0	---	---	23.5	18.5	26.0	21.5
6	12.0	7.5	16.5	14.0	28.0	24.0	---	---	24.5	19.5	24.0	21.5
7	14.0	7.5	16.0	14.0	26.0	23.0	---	---	25.0	20.0	23.5	20.5
8	14.5	10.0	16.5	13.0	26.5	22.0	---	---	26.0	20.5	25.5	21.5
9	14.5	10.0	18.0	13.5	24.5	20.0	---	---	25.5	21.0	26.0	21.5
10	14.5	9.0	20.5	14.5	24.5	19.5	---	---	26.5	22.5	26.0	22.5
11	15.5	9.5	18.5	16.0	24.0	20.5	---	---	26.5	23.0	24.5	21.5
12	17.5	11.5	17.0	14.5	23.5	21.0	---	---	25.5	21.0	21.5	19.5
13	17.0	13.5	16.5	12.5	26.5	21.5	---	---	26.0	20.5	20.0	18.5
14	15.5	10.5	19.5	12.5	25.5	22.5	26.0	22.0	26.0	21.0	22.0	17.0
15	15.5	9.5	21.0	15.5	25.0	22.5	26.0	21.5	24.5	22.5	23.0	19.0
16	16.5	11.0	22.0	17.0	26.0	21.5	25.5	21.5	25.5	20.0	21.0	18.5
17	18.0	14.0	23.5	17.0	26.5	21.5	25.5	22.0	25.5	20.0	---	---
18	18.0	14.0	25.5	19.5	27.5	22.0	24.0	21.5	26.0	23.0	---	---
19	18.0	13.0	24.5	20.5	25.5	23.5	23.5	20.5	25.5	21.5	---	---
20	20.5	14.0	24.0	19.0	28.5	22.5	24.0	19.0	25.5	22.5	---	---
21	18.0	14.5	23.0	18.0	27.0	24.0	24.5	19.5	26.0	23.0	---	---
22	17.5	12.0	21.5	16.5	26.5	22.0	26.0	21.0	25.0	23.0	---	---
23	16.0	11.5	21.0	15.5	27.5	22.0	25.5	22.0	25.0	21.5	---	---
24	16.0	11.0	20.5	18.0	27.5	23.0	24.5	21.5	24.5	19.0	---	---
25	17.0	11.5	19.5	16.0	26.5	23.5	24.5	21.0	22.5	21.0	---	---
26	17.0	12.5	17.5	14.0	24.5	19.5	24.5	22.0	24.5	21.0	---	---
27	16.5	11.5	16.0	13.5	25.5	22.5	24.5	20.0	22.5	20.5	---	---
28	17.0	12.0	17.5	13.0	26.0	23.5	23.5	20.0	22.5	19.5	---	---
29	13.5	11.5	19.5	14.0	25.0	22.5	25.0	20.5	24.5	19.0	---	---
30	16.0	10.5	21.5	15.5	26.0	22.5	23.0	20.0	25.0	20.0	---	---
31	---	---	23.0	17.0	---	---	23.0	18.5	25.0	20.0	---	---
MONTH	20.5	7.5	25.5	10.0	28.5	18.5	---	---	26.5	18.5	---	---
YEAR	28.5	0.0										

03271350 GREAT MIAMI RIVER AT WEST CARROLLTON, OHIO

LOCATION.--Lat 39°40'28", long 84°15'42", Montgomery County, at bridge on Farmersville-West Carrollton Road, at West Carrollton.

DRAINAGE AREA.--2,647 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRITE (NO2) (MG/L)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)
OCT.										
07...	1047	330	0	100	78	--	.90	4.0	3.1	8.1
14...	1240	266	0	79	50	.4	.40	2.7	5.5	4.5
21...	1125	296	0	89	56	--	.45	2.6	8.2	6.0
28...	1030	308	0	95	66	--	.40	3.2	6.0	6.7
NOV.										
11...	1145	316	0	96	64	--	.35	3.2	6.0	6.7
DEC.										
16...	1235	312	0	94	54	--	.50	2.0	11	5.2
JAN.										
13...	1210	310	0	100	46	--	.37	1.5	18	4.1
FEB.										
24...	1035	112	0	36	18	.1	.08	.19	14	1.5
MAR.										
31...	1155	296	0	84	41	--	.26	1.0	17	2.3
APR.										
28...	1045	260	0	76	38	--	.38	.03	6.0	2.5
MAY										
26...	0830	292	0	77	40	.4	.51	1.0	9.4	3.0
JUNE										
30...	0845	232	0	71	26	--	.54	.43	30	2.6
JULY										
07...	1145	296	0	86	38	--	.58	.95	12	3.7
14...	0915	288	0	82	52	--	.51	1.3	5.7	2.2
21...	1155	300	0	100	58	--	1.0	1.2	9.7	4.1
28...	1040	234	0	74	42	--	.47	.31	6.0	1.4
AUG.										
04...	0930	294	0	84	52	--	.49	1.5	6.0	3.7
11...	1130	298	0	95	60	.9	.57	.95	8.0	5.0
18...	1310	312	0	96	68	--	.55	.90	11	5.8
25...	1150	292	0	93	64	--	.47	.40	7.7	4.7
SEP.										
01...	1155	322	0	100	71	--	1.2	.73	11	5.2
08...	1235	204	0	63	36	--	.51	.77	8.4	4.0
15...	1210	294	0	88	56	--	.45	.59	13	4.3
22...	1245	282	0	81	54	--	.51	.16	11	4.4

DATE	TIME	IRON (FE) (UG/L)	MANGANESE (MN) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.										
14...	1240	320	240	10	33	8	10	0	.01	2
21...	1125	40	--	--	49	--	60	--	--	0
FEB.										
24...	1035	60	13	0	37	60	30	10	.02	0
MAY										
26...	0830	990	7	0	14	21	210	10	.02	0
JULY										
14...	0915	120	--	--	13	--	70	--	--	0
21...	1155	650	--	--	10	--	70	--	--	0
AUG.										
11...	1130	340	83	0	9	15	60	10	--	0
18...	1310	350	--	--	10	--	80	--	--	0
SEP.										
08...	1235	1200	--	--	22	--	50	--	--	0
15...	1210	300	--	--	16	--	25	--	--	1

03271350 GREAT MIAMI RIVER AT WEST CARROLLTON, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: April 1965 to September 1971.

REMARKS.--Samples for iron and manganese filtered clear when collected. Samples collected weekly October, July to September, and monthly November to June. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	TUR-BID-ITY (JTU)	ODOR (THRES-HOLD NUMBER)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.										
07...	534	340	71	919	7.7	20.5	15	8	2.6	28
14...	424	280	62	729	7.8	21.5	25	4	4.5	50
21...	470	320	77	799	7.6	17.0	30	4	5.5	57
28...	492	330	77	812	7.9	21.5	25	4	3.7	42
NOV.										
11...	502	330	70	859	7.9	17.0	20	4	5.9	61
DEC.										
16...	486	350	94	830	7.8	8.0	6	8	9.4	80
JAN.										
13...	474	350	96	819	7.9	8.0	15	4	10.3	86
FEB.										
24...	192	150	58	329	7.9	2.5	110	4	13.2	97
MAR.										
31...	424	330	87	752	7.9	11.0	10	4	11.2	101
APR.										
28...	384	280	66	672	7.8	15.0	40	4	9.4	92
MAY										
26...	414	320	80	714	8.2	11.0	35	4	8.5	76
JUNE										
30...	370	280	90	550	7.5	26.5	45	4	6.7	82
JULY										
07...	466	320	77	720	7.8	29.0	35	4	8.6	110
14...	440	320	84	729	8.0	26.0	35	4	6.3	89
21...	484	300	54	806	7.7	27.0	25	4	4.8	62
28...	362	260	68	632	7.7	26.0	20	1	7.4	90
AUG.										
04...	446	320	78	764	7.7	27.5	20	4	5.0	62
11...	478	320	76	816	7.7	28.5	15	4	4.1	52
18...	512	320	64	854	7.8	28.0	30	8	5.5	70
25...	486	300	60	793	7.7	26.5	15	2	4.8	59
SEP.										
01...	532	310	46	866	7.8	27.5	20	4	2.0	25
08...	328	230	63	555	7.6	28.5	45	4	6.2	79
15...	460	320	78	780	7.8	25.5	20	4	5.6	67
22...	440	310	78	749	7.8	22.0	20	4	7.1	81

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO

LOCATION.--Lat 39°36'39", long 84°17'28", Montgomery County, in O. H. Hutchings power plant 400 ft downstream from Chautauqua Road bridge, about 2 miles south of Miamisburg off Old U.S. Highway 25, and 2.6 miles downstream from gaging station at Miamisburg.

DRAINAGE AREA.--2,715 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1962 to March 1964 (partial-record station), March 1964 to September 1971.
Water temperatures: March 1964 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,000 micromhos Feb. 3; minimum, 310 micromhos June 28.
pH: Maximum, 9.3 May 19, 20; minimum, 6.8 Apr. 15.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.							
01...	1340	--	--	--	--	--	--
09...	1500	408	312	0	120	78	1.0
20...	0940	480	147	0	52	29	.6
NOV.							
03...	1300	595	302	0	97	56	.6
13...	1050	490	314	0	110	71	.8
DEC.							
23...	1800	1430	278	0	86	51	.6
JAN.							
12...	0830	892	296	0	96	53	.4
20...	1300	650	279	22	100	64	.6
FEB.							
12...	2100	3160	269	0	79	74	.4
25...	1350	7520	185	0	52	28	.3
MAR.							
17...	1720	4990	224	0	69	34	.3
APR.							
02...	1400	1680	270	0	85	46	.4
30...	1230	749	276	14	93	54	.5
MAY							
13...	1840	3280	261	0	82	39	.4
JUNE							
02...	1425	914	292	0	88	48	.4
02...	1630	--	--	--	--	--	--
08...	1330	1330	256	0	85	46	.4
JULY							
16...	0910	705	258	14	90	58	.5
27...	1250	727	230	8	91	54	.3
AUG.							
06...	1030	480	256	0	84	58	.4
20...	1445	408	266	18	110	75	.6
SEP.							
07...	1330	1550	180	4	52	36	.4
17...	1300	432	264	14	94	60	.6

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
OCT.							
02-23	.00	.00	.00	.00	.00	.00	.00
APR.							
01-07	.00	.00	.00	.00	.00	.00	.00
MAY							
01-07	.00	.00	.00	.00	.00	.00	.00
JUNE							
01-07	.00	.00	.00	.00	.00	.00	.00
JULY							
09-15	.00	.00	.00	.00	.00	.00	.00
AUG.							
01-07	.00	.00	.00	.00	.00	.00	.00
SEP.							
13-19	.00	.00	.00	.04	.00	.00	.00

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO--Continued

EXTREMES, Period of record:
Specific conductance: Maximum, 1,110 micromhos Dec. 29, 1966; minimum, 270 micromhos Apr. 22, 1964.
pH: Maximum, 9.3 May 19, 20, 1971; minimum, 6.7 Oct. 30, 1969.
Dissolved oxygen (1964-68, 1969-70): Maximum, 15.0 mg/l or greater June 8, 1964, Nov. 26, 30, 1966, July 6-8, 1968; minimum, 0.0 mg/l on many days during 1964-66 and 1970.
Water temperatures (1964-70): Maximum, 37.0°C Aug. 16-18, 1965; minimum, 4.0°C on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since March 1964. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for 03271500 Great Miami River at Miamisburg, Ohio (drainage area 2,711 sq mi). Samples were collected at the bridge for pesticide analyses to determine the extent and magnitude of pesticide contamination in the stream.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
01...	--	--	--	--	--	8.0	2.1
09...	12	548	330	74	906	--	--
20...	8.3	270	170	50	438	--	--
NOV.							
03...	8.1	478	320	72	793	--	--
13...	17	528	340	82	879	--	--
DEC.							
23...	14	430	320	92	747	--	--
JAN.							
12...	15	496	350	110	795	--	--
20...	14	514	360	94	867	--	--
FEB.							
12...	13	472	310	89	803	--	--
25...	14	298	220	68	498	--	--
MAR.							
17...	32	426	280	96	618	--	--
APR.							
02...	11	438	320	98	719	--	--
30...	9.2	470	330	80	783	--	--
MAY							
13...	29	446	320	110	689	--	--
JUNE							
02...	19	454	340	100	774	--	--
02...	--	--	--	--	--	12	1.7
08...	18	430	310	100	730	--	--
JULY							
16...	14	458	340	100	781	--	--
27...	10	388	290	88	688	--	--
AUG.							
06...	9.7	426	300	90	730	--	--
20...	10	524	340	92	855	--	--
SEP.							
07...	5.4	290	210	56	522	--	--
17...	14	486	330	90	834	--	--

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
OCT.							
02-23	.00	.00	.00	.00	.00	.00	.00
APR.							
01-07	.00	.00	.00	.00	.00	.00	.00
MAY							
01-07	.00	.00	.00	.00	.00	.00	.00
JUNE							
01-07	.00	.00	.01	.00	.00	.00	.00
JULY							
09-15	.00	.00	.00	--	.00	.00	.00
AUG.							
01-07	.00	.00	.00	.00	.00	.00	.00
SEP.							
13-19	.00	.00	.00	.00	.00	.00	.00

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	900	870	840	820	810	780	820	790	---	---	---	---
2	960	890	840	800	810	790	810	790	950	900	---	---
3	910	880	800	760	820	730	810	770	1000	900	---	---
4	940	900	---	---	---	---	770	550	920	630	---	---
5	940	900	860	830	---	---	680	570	640	360	---	---
6	920	900	870	850	---	---	680	640	400	350	---	---
7	940	900	880	850	---	---	670	640	460	360	---	---
8	940	900	890	870	820	770	710	650	500	460	---	---
9	940	910	880	830	850	820	740	690	580	480	---	---
10	980	920	890	850	860	840	740	700	600	520	---	---
11	960	870	880	860	880	740	760	710	---	---	---	---
12	880	860	890	860	870	800	780	720	---	---	---	---
13	---	---	900	860	810	690	770	750	---	---	---	---
14	---	---	890	800	760	690	780	680	---	---	---	---
15	---	---	870	840	800	760	800	750	---	---	620	590
16	790	770	840	790	790	740	790	750	---	---	650	600
17	840	790	860	790	790	720	820	760	---	---	620	580
18	860	830	900	860	780	720	840	770	---	---	650	590
19	840	820	920	870	820	780	880	830	---	---	670	600
20	840	800	900	820	800	790	880	830	---	---	700	650
21	840	800	820	790	810	750	880	840	---	---	780	700
22	820	770	---	---	800	670	870	850	---	---	750	660
23	850	780	---	---	740	650	890	860	---	---	710	670
24	880	850	---	---	750	720	880	830	---	---	720	670
25	880	860	---	---	740	720	850	820	---	---	740	700
26	890	870	---	---	750	730	---	---	---	---	740	690
27	890	860	---	---	770	740	---	---	---	---	750	700
28	870	850	---	---	780	760	870	860	---	---	760	710
29	880	830	---	---	800	770	870	820	---	---	740	690
30	900	860	780	770	810	750	---	---	---	---	750	710
31	880	840	---	---	820	790	---	---	---	---	760	710
MONTH	980	770	---	---	880	650	890	550	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	760	720	820	790	780	740	570	510	---	---	860	810
2	770	710	820	790	770	740	600	560	---	---	840	740
3	760	730	810	750	---	---	670	600	---	---	850	770
4	770	740	820	750	810	770	680	650	---	---	770	610
5	750	690	850	820	780	770	700	610	720	650	700	630
6	750	710	850	480	770	700	700	650	760	720	720	650
7	760	740	680	530	780	750	750	690	790	760	650	500
8	760	740	700	540	780	700	730	680	---	---	---	---
9	780	750	720	690	750	700	---	---	---	---	---	---
10	780	740	720	670	770	690	---	---	---	---	720	650
11	800	750	770	690	780	740	---	---	---	---	730	650
12	760	700	770	740	---	---	630	610	820	800	710	680
13	760	730	750	660	---	---	730	630	830	790	730	680
14	780	730	660	620	---	---	---	---	850	820	760	720
15	770	730	760	660	---	---	770	750	860	800	770	740
16	780	740	740	670	770	750	790	760	840	800	850	760
17	800	760	750	700	820	760	800	770	860	810	850	810
18	800	740	---	---	840	800	---	---	900	830	880	810
19	780	740	880	780	---	---	---	---	880	830	860	830
20	810	770	850	710	800	750	810	790	870	850	860	710
21	830	770	820	720	790	730	---	---	900	850	750	650
22	820	790	880	800	770	740	---	---	880	800	790	670
23	810	790	910	850	830	770	---	---	800	670	800	770
24	820	790	860	830	810	790	---	---	790	680	820	780
25	820	780	830	660	830	730	---	---	800	780	830	780
26	810	780	820	790	---	---	680	650	810	780	840	760
27	820	770	800	710	---	---	720	670	820	770	760	670
28	780	610	810	710	330	310	750	690	820	780	820	710
29	770	610	820	750	420	320	---	---	850	790	830	800
30	820	770	810	750	520	420	---	---	840	800	820	790
31	---	---	770	720	---	---	---	---	850	790	---	---
MONTH	830	610	910	480	---	---	---	---	---	---	880	500
YEAR	1000	310										

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.4	7.1	7.2	7.0	7.5	7.4	7.6	7.4	---	---	---	---
2	7.5	7.2	7.4	7.2	7.4	7.3	7.6	7.4	7.7	7.4	---	---
3	7.5	7.3	7.4	7.2	7.3	7.0	7.6	7.5	7.6	7.3	---	---
4	7.5	7.2	---	---	---	---	7.8	7.5	8.1	7.6	---	---
5	7.5	7.2	7.3	7.2	---	---	7.7	7.4	8.1	7.8	---	---
6	7.4	7.1	7.4	7.2	---	---	7.6	7.2	8.2	7.8	---	---
7	7.4	7.1	7.4	7.3	---	---	7.4	7.0	8.0	7.6	---	---
8	7.4	7.0	7.3	7.3	7.9	7.6	7.4	7.0	8.0	7.7	---	---
9	7.4	7.1	7.4	7.2	7.8	7.5	7.5	7.4	8.0	7.6	---	---
10	7.5	7.2	7.4	7.3	7.6	7.4	7.5	7.2	8.4	7.7	---	---
11	7.6	7.2	7.4	7.1	7.6	7.4	7.6	7.3	---	---	---	---
12	7.6	7.4	7.4	7.2	7.6	7.4	7.5	7.3	---	---	---	---
13	---	---	7.4	7.2	7.8	7.5	7.5	7.2	---	---	---	---
14	---	---	7.4	7.3	7.8	7.5	7.7	7.4	---	---	---	---
15	---	---	7.5	7.3	---	---	7.6	7.3	---	---	7.7	7.6
16	7.3	7.2	8.4	7.4	---	---	7.5	7.2	---	---	7.7	7.5
17	7.3	7.1	8.3	7.7	---	---	7.4	7.1	---	---	7.5	7.4
18	7.4	7.3	7.7	7.6	---	---	7.6	7.1	---	---	7.6	7.4
19	7.4	7.3	7.6	7.4	7.8	7.5	7.6	7.5	---	---	7.6	7.4
20	7.4	7.1	7.7	7.5	7.7	7.5	7.6	7.3	---	---	8.0	7.5
21	7.3	7.1	7.9	7.7	7.7	7.6	7.5	7.4	---	---	8.1	7.9
22	7.3	7.1	---	---	7.7	7.5	7.6	7.4	---	---	7.9	7.5
23	7.2	7.1	---	---	7.7	7.7	7.5	7.4	---	---	7.6	7.5
24	7.2	7.0	---	---	7.9	7.7	7.5	7.4	---	---	7.7	7.6
25	---	---	---	---	8.0	7.8	7.5	7.4	---	---	7.7	7.6
26	7.2	7.2	---	---	8.0	7.9	---	---	---	---	7.8	7.5
27	7.4	7.2	---	---	7.9	7.8	---	---	---	---	7.8	7.6
28	7.2	7.1	---	---	---	---	7.3	7.2	---	---	8.0	7.8
29	7.2	7.0	---	---	7.7	7.6	7.2	7.0	---	---	7.9	7.7
30	7.3	7.1	7.6	7.5	7.6	7.4	---	---	---	---	7.9	7.7
31	7.2	7.1	---	---	7.6	7.4	---	---	---	---	8.0	7.7
MONTH	7.6	7.0	---	---	---	---	7.8	7.0	---	---	---	---

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.8	8.3	8.0	8.5	8.0	8.3	8.1	---	---	8.0	7.8
2	7.9	7.8	8.3	8.0	8.4	7.8	8.3	8.1	---	---	8.0	7.9
3	8.1	7.7	8.5	8.2	---	---	8.2	8.1	---	---	8.1	7.8
4	8.3	7.9	8.4	7.8	8.3	8.0	8.4	8.1	---	---	8.0	7.7
5	8.2	8.0	8.2	7.5	8.6	8.1	8.4	8.2	7.9	7.8	7.9	7.7
6	8.0	7.8	8.3	7.5	8.8	8.4	8.4	8.2	8.0	7.8	8.1	7.7
7	8.0	7.5	8.4	8.0	8.6	8.2	8.5	8.2	8.0	7.8	8.2	7.7
8	7.9	7.5	8.3	8.2	8.2	8.0	8.7	8.4	---	---	---	---
9	7.9	7.7	8.3	8.2	8.3	7.9	---	---	---	---	---	---
10	7.8	7.3	8.4	8.2	8.6	7.9	---	---	---	---	8.0	7.6
11	7.8	7.7	8.4	8.2	8.6	8.1	---	---	---	---	8.4	7.7
12	7.7	7.2	8.6	8.2	---	---	8.2	8.1	7.9	7.8	8.0	7.8
13	7.5	7.0	8.7	8.4	---	---	8.5	8.2	7.9	7.7	8.0	7.9
14	7.5	7.0	8.7	8.4	---	---	---	---	7.9	7.8	7.9	7.7
15	7.5	6.8	8.6	8.4	---	---	8.8	8.4	8.0	7.8	7.9	7.8
16	7.6	7.0	8.9	8.4	8.1	8.0	8.7	8.3	8.0	7.9	7.8	7.4
17	7.6	7.1	8.9	8.2	8.3	8.0	8.4	8.2	8.0	7.9	7.5	7.4
18	7.9	7.4	---	---	8.4	7.9	---	---	8.1	7.8	7.7	7.4
19	7.8	7.5	9.3	8.2	---	---	---	---	8.1	7.8	7.6	7.4
20	7.9	7.3	9.3	8.6	8.1	7.9	8.2	8.1	8.0	7.9	7.6	7.4
21	7.8	7.3	9.0	8.3	8.3	8.0	---	---	8.0	7.9	7.7	7.4
22	7.8	7.4	9.0	8.2	8.1	7.8	---	---	8.0	7.8	7.6	7.5
23	7.8	7.4	9.0	8.3	8.0	7.9	---	---	8.0	7.8	7.5	7.4
24	8.0	7.5	8.9	8.3	7.9	7.8	---	---	8.0	7.7	7.8	7.5
25	8.1	7.8	8.8	8.3	8.1	7.8	---	---	7.9	7.7	7.7	7.5
26	8.5	8.0	8.4	8.1	---	---	8.0	7.9	7.9	7.7	7.9	7.6
27	8.6	8.2	8.4	8.1	---	---	8.1	7.9	7.9	7.7	7.9	7.6
28	8.5	7.8	8.4	8.0	8.4	8.3	8.2	8.1	7.9	7.8	7.7	7.6
29	8.2	7.7	8.4	8.1	8.5	8.3	---	---	8.0	7.8	7.7	7.4
30	8.3	8.1	8.5	8.0	8.4	8.2	---	---	7.9	7.7	8.0	7.7
31	---	---	8.5	8.1	---	---	---	---	8.0	7.8	---	---
MONTH	8.6	6.8	9.3	7.5	---	---	---	---	---	---	8.4	7.4
YEAR	9.3	6.8										

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.9	1.9	3.6	2.3	5.3	2.9	---	---	---	---	---	---
2	3.5	1.6	3.9	3.0	3.0	1.9	---	---	7.6	7.1	---	---
3	4.5	1.7	4.4	3.3	2.7	1.6	---	---	7.2	6.8	---	---
4	4.4	3.3	4.2	3.4	---	---	9.3	8.1	10.2	7.1	---	---
5	5.3	3.5	4.4	3.9	---	---	9.6	9.0	11.1	9.1	---	---
6	5.8	4.1	4.2	3.1	---	---	10.5	9.6	11.6	10.8	---	---
7	5.5	2.3	4.0	2.9	---	---	10.7	9.7	10.9	10.1	---	---
8	3.7	2.4	4.5	3.7	7.2	5.4	10.5	9.6	10.5	9.9	---	---
9	3.9	3.1	4.5	3.8	5.4	3.3	10.1	9.4	10.4	9.9	---	---
10	4.0	1.8	4.8	2.3	3.7	1.4	9.7	9.4	10.3	9.0	---	---
11	3.7	1.3	3.5	2.0	2.6	1.3	9.8	9.0	---	---	---	---
12	4.1	3.4	3.5	2.4	3.2	1.5	9.5	8.4	---	---	---	---
13	---	---	3.4	2.8	5.7	3.1	9.0	8.3	---	---	---	---
14	---	---	5.1	3.4	6.8	5.7	9.3	8.5	---	---	---	---
15	---	---	---	---	---	---	9.9	9.1	---	---	9.5	9.0
16	4.5	3.4	---	---	---	---	---	---	---	---	10.0	8.9
17	4.4	3.8	---	---	---	---	11.2	9.8	---	---	10.4	9.7
18	4.3	2.1	---	---	6.7	6.2	11.3	10.6	---	---	10.4	9.8
19	4.5	3.5	---	---	6.3	1.6	---	---	---	---	10.1	9.6
20	5.0	4.2	---	---	2.9	1.6	---	---	---	---	10.8	9.9
21	4.2	2.2	---	---	7.2	2.9	---	---	---	---	10.0	9.3
22	3.5	2.6	---	---	8.3	6.8	---	---	---	---	10.3	9.3
23	3.4	2.5	---	---	8.4	7.5	---	---	---	---	10.6	9.7
24	3.4	2.4	---	---	9.4	8.1	---	---	---	---	10.9	10.2
25	3.9	3.3	---	---	10.0	9.2	---	---	---	---	10.8	10.0
26	3.9	1.3	---	---	10.2	9.8	---	---	---	---	10.5	9.2
27	2.6	1.4	---	---	---	---	---	---	---	---	10.1	9.6
28	2.5	1.5	---	---	9.2	8.5	9.5	9.1	---	---	9.9	9.5
29	3.0	2.5	---	---	9.2	7.5	---	---	---	---	9.8	9.2
30	2.6	1.3	5.4	5.3	8.1	7.3	---	---	---	---	9.8	9.3
31	2.5	1.7	---	---	7.6	6.5	---	---	---	---	9.7	9.2
MONTH	5.8	1.3	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.4	8.5	6.8	4.4	7.8	4.6	4.9	4.0	---	---	5.9	1.4
2	10.3	8.7	5.8	3.6	6.5	4.0	4.8	4.2	---	---	4.3	0.6
3	11.3	9.6	6.8	4.6	---	---	4.3	4.0	---	---	2.0	0.2
4	12.5	10.1	6.3	4.3	3.7	1.3	5.3	4.0	---	---	4.6	0.8
5	13.1	10.4	5.6	3.7	4.6	2.2	4.9	4.3	5.0	4.0	4.6	1.7
6	11.3	9.2	6.7	4.1	6.7	2.9	5.3	4.6	6.4	2.1	4.0	1.4
7	11.0	8.6	7.1	5.7	3.9	2.0	5.5	4.2	6.4	3.8	7.3	3.9
8	10.9	8.5	7.4	6.8	2.9	1.4	5.3	4.2	---	---	---	---
9	10.3	7.7	7.3	6.9	3.6	2.0	---	---	---	---	---	---
10	11.8	7.8	7.2	6.4	7.2	2.1	---	---	---	---	3.5	0.2
11	11.5	8.0	6.8	6.0	4.7	2.0	---	---	---	---	5.3	0.1
12	12.0	7.6	7.0	6.2	---	---	3.5	3.2	2.7	1.8	2.4	0.7
13	9.5	5.6	7.6	6.5	---	---	4.2	1.9	3.7	1.8	2.3	0.9
14	11.2	5.8	7.1	6.0	---	---	---	---	3.4	1.1	2.9	1.1
15	11.1	4.5	6.7	5.6	---	---	4.3	3.0	5.3	1.2	3.5	0.8
16	11.5	5.3	6.5	4.8	5.9	5.0	4.5	2.3	5.5	1.6	2.6	1.1
17	9.3	5.1	5.6	4.4	6.0	1.9	4.3	2.0	6.0	2.1	2.0	1.1
18	11.0	5.2	---	---	6.2	1.7	---	---	9.3	2.4	2.4	1.6
19	10.5	5.3	7.3	3.5	---	---	---	---	6.8	1.0	2.5	2.1
20	10.4	4.2	7.3	4.3	2.7	0.8	4.1	2.2	5.1	0.3	3.4	2.1
21	8.1	3.7	8.1	4.4	1.8	0.7	---	---	5.8	0.7	4.2	3.4
22	9.1	3.4	9.5	4.5	3.2	1.0	---	---	5.7	2.2	4.4	3.9
23	8.5	4.5	10.1	5.0	2.5	0.5	---	---	4.8	1.5	4.3	3.3
24	9.0	4.4	9.7	4.7	2.6	0.7	---	---	6.0	3.3	5.2	3.6
25	11.3	5.0	7.0	4.4	3.2	0.5	---	---	5.6	3.1	4.7	3.2
26	12.9	5.5	7.9	5.3	---	---	4.1	2.5	4.5	2.1	4.8	3.7
27	11.0	5.3	8.0	5.8	---	---	4.2	1.7	4.2	1.4	5.0	4.2
28	9.5	5.3	8.3	5.9	4.8	4.5	4.3	1.6	2.6	1.5	4.7	3.5
29	6.8	4.5	8.0	5.3	5.1	4.8	---	---	4.0	1.7	4.9	2.6
30	7.4	4.1	8.8	5.7	5.2	4.7	---	---	4.7	0.9	5.0	2.8
31	---	---	8.4	5.5	---	---	---	---	7.3	2.5	---	---
MONTH	13.1	3.4	10.1	3.5	---	---	---	---	---	---	7.3	0.1

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	23.0	---	---	18.5	16.0	---	---	---	---	---	---
2	25.0	22.5	---	---	21.0	18.5	---	---	---	---	---	---
3	24.5	23.0	---	---	22.0	21.0	---	---	---	---	---	---
4	25.0	22.0	---	---	---	---	15.0	10.0	13.0	8.0	---	---
5	24.5	22.0	17.0	16.0	---	---	---	---	13.0	4.0	---	---
6	25.0	21.5	17.0	16.0	---	---	11.0	9.0	8.0	5.0	---	---
7	26.0	22.0	18.0	17.0	---	---	16.0	7.0	8.5	6.0	---	---
8	27.0	23.0	18.0	16.5	13.0	10.0	17.0	12.5	9.0	5.0	---	---
9	27.0	24.0	19.0	17.5	15.0	13.0	16.0	14.0	---	---	---	---
10	26.0	22.5	18.5	17.0	16.5	14.0	16.0	8.0	---	---	---	---
11	23.0	22.0	19.5	18.0	20.0	16.0	15.0	13.0	---	---	---	---
12	25.0	23.0	20.0	19.0	20.0	17.5	---	13.0	---	---	---	---
13	---	---	20.0	19.0	21.0	16.0	---	13.0	---	---	---	---
14	---	---	---	---	---	---	---	11.0	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	16.0	13.0
16	21.0	19.5	---	---	---	---	---	---	---	---	15.0	11.0
17	20.0	20.0	---	---	---	---	---	---	---	---	14.5	10.5
18	---	---	---	---	13.5	11.5	---	---	---	---	15.0	10.0
19	21.0	20.0	---	---	19.0	13.5	---	---	---	---	11.0	9.0
20	21.0	17.0	---	---	---	---	---	---	---	---	13.5	9.5
21	21.0	20.0	---	---	13.0	11.0	---	---	---	---	15.0	12.0
22	21.0	18.0	---	---	15.0	11.0	---	---	---	---	14.0	9.0
23	21.0	20.0	---	---	---	---	---	---	---	---	12.5	8.0
24	---	---	---	---	---	---	---	---	---	---	9.5	7.5
25	---	---	---	---	---	---	---	---	---	---	10.5	8.5
26	23.0	22.0	---	---	---	---	---	---	---	---	10.5	9.5
27	22.5	22.0	---	---	---	---	---	---	---	---	11.5	9.5
28	24.0	22.0	---	---	16.0	12.0	---	---	---	---	14.5	10.5
29	---	---	---	---	19.0	11.0	---	---	---	---	13.5	11.5
30	22.0	20.0	16.0	15.5	---	18.0	---	---	---	---	13.5	11.5
31	22.5	21.0	---	---	---	---	---	---	---	---	15.0	11.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	14.0	19.0	16.5	---	---	26.5	26.0	---	---	---	---
2	14.5	12.5	19.0	17.0	---	---	27.0	26.0	---	---	29.5	23.5
3	14.5	11.5	17.0	15.5	---	---	27.5	26.0	---	---	29.5	23.5
4	15.5	11.5	17.5	14.5	31.0	27.0	26.5	25.5	---	---	26.5	24.5
5	13.5	11.5	17.5	16.0	30.5	29.0	27.0	25.0	24.0	22.5	26.5	25.0
6	14.5	11.0	18.5	16.0	31.0	29.0	27.0	24.5	25.0	23.0	29.5	26.0
7	15.5	11.0	18.5	15.0	31.0	28.5	27.0	24.5	25.5	24.5	26.0	24.5
8	17.0	13.5	16.5	14.0	31.0	28.5	27.0	25.5	---	---	---	---
9	18.0	15.0	17.5	15.5	29.0	27.0	---	---	---	---	---	---
10	18.0	14.0	19.5	16.5	29.5	25.5	---	---	---	---	29.0	27.0
11	20.0	15.0	19.5	17.5	30.5	27.0	---	---	---	---	29.5	20.5
12	21.0	15.5	18.0	15.0	---	---	27.0	25.5	27.0	26.5	28.5	25.5
13	21.5	19.0	17.5	15.0	---	---	28.5	25.0	29.0	26.0	26.0	23.0
14	21.5	17.5	19.0	17.0	---	---	---	---	26.0	25.0	26.0	23.0
15	21.0	16.5	20.5	19.0	---	---	27.0	25.0	25.5	21.0	26.5	24.0
16	23.5	17.5	22.0	20.0	28.0	27.0	27.0	25.0	26.0	23.5	27.0	24.0
17	22.5	18.5	24.5	21.5	28.0	26.0	26.5	25.0	26.5	21.5	27.0	24.5
18	22.5	19.0	---	---	28.0	26.0	---	---	27.0	24.0	27.5	24.5
19	24.0	18.5	26.5	24.0	---	---	---	---	28.5	23.0	27.0	24.5
20	25.5	19.5	26.5	23.5	27.5	26.5	25.0	22.5	31.5	25.0	25.0	23.5
21	24.5	19.0	24.0	22.0	27.0	25.5	---	---	29.0	26.0	24.5	22.5
22	21.0	17.5	24.0	21.0	28.0	26.0	---	---	27.5	23.5	24.5	22.5
23	20.5	17.0	---	---	29.5	27.0	---	---	27.0	25.0	25.0	23.5
24	21.0	17.0	---	---	29.5	27.5	---	---	26.0	23.5	24.5	22.5
25	19.5	16.0	---	---	29.0	27.0	---	---	31.5	24.5	23.5	22.5
26	18.5	16.0	---	---	---	---	25.0	24.0	33.0	25.0	23.5	22.0
27	20.0	16.5	---	---	---	---	26.0	23.5	28.5	25.5	24.5	22.5
28	19.0	17.5	---	---	22.5	22.0	25.0	24.0	27.0	24.0	27.0	24.0
29	18.5	15.5	---	---	25.0	22.5	---	---	27.0	24.0	29.0	26.5
30	19.0	16.0	---	---	26.0	24.0	---	---	---	---	29.0	27.5
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	25.5	11.0	---	---	---	---	---	---	---	---	29.5	20.5

03272010 TWIN CREEK AT GERMANTOWN, OHIO

LOCATION.--Lat 39°37'22", long 84°23'33", Montgomery County, at bridge on State Highway 725, 1 mile downstream from gaging station, and approximately 0.1 mile west of Germantown.

DRAINAGE AREA.--275 sq mi (at gaging station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRITE (NO2) (MG/L)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)
OCT.											
07...	1145	11	322	0	53	22	--	.05	.05	6.7	.17
14...	1424	54	278	0	62	22	.3	.05	.05	8.6	.40
21...	1220	84	284	0	56	20	--	.00	.00	3.1	.58
28...	1120	28	300	0	58	22	--	.00	.00	3.7	.24
NOV.											
11...	0925	36	324	0	58	20	--	.00	.09	5.3	.32
DEC.											
16...	1340	69	320	0	64	26	--	.05	.01	9.4	.21
JAN.											
13...	1245	88	326	0	66	26	--	.08	.05	10	.22
FEB.											
24...	1125	675	186	0	41	20	--	.07	.11	21	.72
MAR.											
31...	1245	114	280	0	60	26	--	.06	.07	19	.21
APR.											
28...	1115	78	274	0	58	20	--	.07	.00	5.0	.14
MAY											
26...	0940	243	276	0	54	22	--	.21	.08	30	.79
JUNE											
30...	1000	26	274	0	54	18	--	.45	.07	2.0	.38
JULY											
07...	1225	20	274	0	61	20	--	.10	.30	3.1	.46
14...	1020	22	260	0	50	20	--	.08	.08	2.7	.05
21...	1230	15	278	0	55	20	--	.16	.07	3.7	.34
28...	1110	23	256	0	47	20	--	.08	.03	2.7	.60
AUG.											
04...	1020	57	252	0	43	23	--	.18	.02	8.0	.88
11...	1200	17	262	0	51	20	.6	.08	.06	4.2	.29
18...	0935	11	300	0	50	24	--	.06	.08	3.0	.29
25...	0940	7.0	308	0	50	22	--	.05	.04	2.7	.26
SEP.											
01...	0950	8.5	304	0	56	20	--	.09	.06	6.7	.48
08...	1320	13	294	0	54	20	--	.09	.19	3.3	.19
15...	0950	12	300	0	50	20	--	.06	.02	2.7	.15
22...	1005	16	282	0	50	18	--	.08	.10	3.6	.41

DATE	TIME	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.										
14...	1424	230	21	2	28	2	0	0	.00	2
AUG.										
11...	1200	340	100	0	0	3	30	10	--	0

03272010 TWIN CREEK AT GERMANTOWN, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: August 1967 to September 1971.

REMARKS.--Samples for iron and manganese were filtered clear when collected. Samples were collected weekly October, July to September, and monthly November to June. Records of discharge are given for 03272000 Twin Creek near Germantown, Ohio.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	TUR-BID-ITY (JTU)	ODOR (THRES-HOLD NUMBER)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.										
07...	396	340	76	627	8.2	13.5	20	2	9.3	88
14...	362	300	72	582	8.1	16.0	20	2	9.2	92
21...	358	300	67	583	7.9	11.0	20	2	12.2	110
28...	372	330	84	613	7.9	15.0	10	2	8.6	84
NOV.										
11...	390	350	84	660	8.0	8.0	10	0	10.4	87
DEC.										
16...	416	360	98	681	8.1	2.5	2	0	12.6	93
JAN.										
13...	418	370	100	703	8.1	1.5	8	0	13.8	98
FEB.										
24...	284	230	78	458	7.9	2.5	55	0	12.4	91
MAR.										
31...	384	330	100	632	8.0	9.0	5	2	13.0	112
APR.										
28...	360	300	75	596	7.8	12.5	10	0	10.8	100
MAY										
26...	402	300	74	604	8.0	12.5	70	0	8.1	76
JUNE										
30...	326	290	65	548	7.6	24.0	30	4	6.9	81
JULY										
07...	328	290	65	558	8.0	29.5	20	4	8.8	110
14...	318	260	46	530	8.0	23.0	25	2	8.4	96
21...	322	290	62	560	8.1	21.0	20	4	9.9	124
28...	290	270	60	523	7.9	19.5	30	2	8.3	89
AUG.										
04...	310	260	53	520	7.9	20.5	70	2	7.6	84
11...	324	280	65	538	8.0	24.0	20	2	8.0	94
18...	366	310	64	590	7.9	17.0	30	2	8.9	92
25...	348	310	57	602	7.9	17.0	20	2	7.6	78
SEP.										
01...	348	310	60	597	7.9	18.0	15	4	7.7	81
08...	328	300	58	583	7.8	25.0	10	4	10.0	120
15...	332	300	54	592	7.9	16.0	25	2	7.7	77
22...	346	300	68	565	7.8	15.0	25	2	11.2	110

03272100 GREAT MIAMI RIVER AT MIDDLETOWN, OHIO

LOCATION.--Lat 39°32'31", long 84°21'27", Butler County, on left bank at County Park dock at Middletown, about 0.6 mile downstream from New York Central Railroad bridge, and 0.3 mile downstream from Twin Creek.

DRAINAGE AREA.--3,134 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRITE (NO2) (MG/L)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)
OCT.										
07...	1238	322	0	100	62	--	.90	2.0	4.1	5.5
14...	1502	288	0	85	56	.4	.90	2.5	4.8	5.0
21...	1250	294	0	92	64	--	1.0	2.0	7.7	5.2
28...	1225	316	0	92	64	--	1.0	1.9	3.7	4.2
NOV.										
11...	1010	332	0	97	64	--	1.0	1.9	7.1	4.8
DEC.										
16...	1410	300	0	87	56	--	1.0	1.0	9.0	5.2
JAN.										
13...	1315	280	0	94	50	--	.60	1.3	16	3.4
FEB.										
24...	1200	110	0	36	16	.2	.09	.19	10	.60
MAR.										
31...	1315	302	0	88	46	--	.28	.52	16	2.1
APR.										
28...	1230	310	0	92	50	--	.82	.33	7.3	3.5
MAY										
26...	1015	260	0	76	44	.4	.59	.62	8.7	2.5
JUNE										
30...	1035	222	0	67	24	--	.67	.63	30	2.2
JULY										
07...	1255	290	0	83	38	--	.71	.13	22	2.5
14...	1045	284	0	82	52	--	.94	.40	9.0	2.2
21...	1300	298	0	95	56	--	1.6	.88	10	3.2
28...	1140	250	0	74	52	--	.57	.20	7.7	3.4
AUG.										
04...	1050	300	0	86	60	--	1.0	.59	6.7	1.4
11...	1310	294	0	91	63	.7	.98	.29	8.0	3.7
18...	1005	306	0	92	72	--	.66	.11	8.0	4.2
25...	1010	240	0	78	52	--	.51	.06	5.3	3.0
SEP.										
01...	1020	306	0	99	76	--	1.3	.18	9.3	2.6
08...	1200	220	0	59	36	--	.54	.21	9.7	1.8
15...	1020	282	0	84	56	--	.43	.02	8.4	2.2
22...	1035	244	0	77	48	--	.49	.10	10	3.5

DATE	TIME	IRON (FE) (UG/L)	MANGANESE (MN) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.										
14...	1502	770	770	10	29	7	10	0	.01	2
21...	1250	140	--	--	49	--	70	--	--	0
FEB.										
24...	1200	60	16	0	43	60	28	10	.01	0
MAY										
26...	1015	790	63	0	8	21	90	6	.03	0
JULY										
14...	1045	130	--	--	7	--	40	--	--	0
21...	1300	490	--	--	6	--	60	--	--	0
AUG.										
11...	1310	260	100	0	0	5	50	10	--	0
18...	1005	170	--	--	3	--	50	--	--	0
SEP.										
08...	1200	300	--	--	1	--	30	--	--	2
15...	1020	280	--	--	6	--	0	--	--	1

03272100 GREAT MIAMI RIVER AT MIDDLETOWN, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: July 1963 to September 1971.

REMARKS.--Samples for iron and manganese were filtered clear when collected. Samples were collected weekly October, July to September, and monthly November to June. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	TUR-BID-ITY (JTU)	ODOR (THRES-HOLD NUMBER)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.										
07...	526	340	80	916	7.9	22.0	20	8	1.5	17
14...	460	310	74	781	7.8	23.0	50	4	.9	10
21...	486	320	78	825	7.6	17.5	35	4	3.7	36
28...	500	340	80	841	7.9	21.0	10	8	2.1	23
NOV.										
11...	518	350	78	897	7.6	14.5	15	4	2.4	23
DEC.										
16...	468	330	64	804	7.7	10.0	20	8	--	--
JAN.										
13...	456	340	100	782	7.7	8.5	20	4	9.1	77
FEB.										
24...	204	160	64	338	8.0	2.5	120	2	13.0	96
MAR.										
31...	448	350	100	759	7.9	11.5	15	8	9.2	84
APR.										
28...	468	340	86	811	7.6	17.5	20	4	6.9	72
MAY										
26...	420	300	80	685	7.9	17.5	25	2	6.3	66
JUNE										
30...	378	270	88	571	7.5	27.0	40	2	5.5	68
JULY										
07...	466	330	92	706	7.8	30.5	15	4	6.7	88
14...	456	310	77	742	7.8	30.0	20	8	3.0	39
21...	476	330	86	791	7.5	24.5	15	8	3.3	40
28...	386	270	64	689	7.7	26.5	10	4	4.0	49
AUG.										
04...	460	320	74	796	7.7	23.0	15	4	1.9	22
11...	478	330	88	798	7.7	31.0	5	2	2.5	33
18...	514	330	78	848	7.8	22.0	20	2	2.3	26
25...	410	260	63	684	7.6	23.0	9	4	1.8	21
SEP.										
01...	508	310	58	859	7.7	25.0	1	4	2.0	24
08...	322	240	60	562	7.4	24.0	20	4	3.9	46
15...	460	310	78	760	7.6	22.5	15	4	3.1	24
22...	424	280	80	678	7.6	24.5	25	4	4.4	52

03272400 GREAT MIAMI RIVER NEAR MIDDLETOWN, OHIO

LOCATION.--Lat 39°25'46", long 84°28'35", Butler County, at bridge on Liberty-Fairfield Road, southwest of Middletown, 0.7 mile upstream from Baltimore and Ohio Railroad bridge.

DRAINAGE AREA.--3,280 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRITE (NO2) (MG/L)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)
OCT.										
01...	1445	--	--	--	--	--	--	--	--	--
07...	1311	310	0	110	80	--	.90	2.7	4.1	3.3
14...	1010	294	0	94	58	.4	.80	3.4	4.5	4.8
21...	1335	284	0	91	58	--	1.5	1.6	7.9	4.1
28...	1250	300	0	110	70	--	1.0	2.9	4.3	3.6
NOV.										
11...	1025	318	0	100	66	--	1.0	2.6	7.8	4.3
DEC.										
16...	1000	296	0	88	54	--	1.5	1.0	11	3.4
JAN.										
13...	1340	294	0	97	50	--	.50	1.2	19	2.4
FEB.										
24...	1230	118	0	36	18	.2	.06	.14	15	1.8
MAR.										
31...	1350	292	0	90	44	--	.35	.73	16	2.0
APR.										
28...	1300	308	0	95	50	--	.55	.03	6.3	2.5
MAY										
26...	1045	272	0	77	44	.4	.74	.86	12	2.4
JUNE										
30...	1115	210	0	66	26	--	.58	.23	31	2.4
JULY										
07...	1330	274	0	87	36	--	.61	.23	24	2.2
14...	1115	222	0	98	43	--	.69	.72	9.0	.79
21...	1330	288	0	100	60	--	1.3	.43	8.4	2.3
28...	1210	238	0	86	52	--	.48	.24	9.0	1.8
AUG.										
04...	1230	252	0	83	52	--	.73	.06	7.7	1.7
11...	1340	282	0	96	60	1.1	.62	.52	6.9	2.5
18...	1035	298	0	100	72	--	.63	.73	5.7	3.1
25...	1040	274	0	100	70	--	.78	.97	6.0	2.5
SEP.										
01...	1045	276	0	120	74	--	1.1	.23	6.0	2.7
08...	1115	220	0	76	50	--	.67	.30	12	2.7
15...	1045	278	0	95	56	--	.43	.46	6.7	1.8
22...	1100	258	0	120	60	--	.45	1.1	8.4	2.8

DATE	TIME	IRON (FE) (UG/L)	MANGANESE (MN) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.										
01...	1445	--	--	--	--	1	20	0	--	--
14...	1010	460	190	0	18	2	0	0	.00	5
21...	1335	100	--	--	77	--	130	--	--	0
FEB.										
24...	1230	50	24	0	68	56	29	10	.02	1
MAY										
26...	1045	2800	110	0	9	20	170	0	.03	0
JULY										
14...	1115	50	--	--	5	--	20	--	--	0
21...	1330	1000	--	--	3	--	90	--	--	0
AUG.										
11...	1340	670	100	0	0	6	80	10	--	2
18...	1035	250	--	--	1	--	80	--	--	0
SEP.										
08...	1115	1700	--	--	7	--	80	--	--	0
15...	1045	1300	--	--	6	--	35	--	--	2

03272400 GREAT MIAMI RIVER NEAR MIDDLETOWN, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: July 1963 to September 1971.

REMARKS.--Samples for iron and manganese were filtered clear when collected. Samples were collected weekly October, July to September, and monthly November to June. No discharge records available. Prior to May 1965, sampling site was 0.7 mile downstream.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC CONDU-CTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	TUR-BID-ITY (JTU)	ODOR (THRES-HOLD NUMBER)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.										
01...	--	--	--	--	--	22.0	--	--	--	--
07...	536	350	94	916	7.7	18.5	15	2	4.0	42
14...	468	320	78	814	8.0	23.0	15	4	2.4	28
21...	460	320	87	788	7.7	16.5	30	4	4.8	49
28...	514	350	104	875	7.8	20.0	20	4	2.9	32
NOV.										
11...	512	360	99	897	7.7	12.5	20	4	3.6	34
DEC.										
16...	462	340	97	782	7.9	9.5	20	8	6.8	60
JAN.										
13...	466	360	120	803	7.8	7.0	20	4	10.3	84
FEB.										
24...	200	150	54	341	7.9	2.5	140	2	13.0	96
MAR.										
31...	436	340	100	761	7.9	12.5	20	4	8.8	82
APR.										
28...	468	350	97	809	7.8	17.5	35	4	9.0	94
MAY										
26...	416	310	86	711	7.6	17.0	70	2	7.2	74
JUNE										
30...	372	260	88	551	7.4	27.0	65	4	7.0	86
JULY										
07...	466	330	100	695	7.9	28.0	30	4	7.8	99
14...	410	280	98	672	7.6	27.0	25	4	8.1	100
21...	480	330	94	819	7.6	26.5	15	8	6.8	84
28...	482	280	84	698	7.6	25.5	6	2	5.6	67
AUG.										
04...	414	290	83	713	7.6	25.0	40	4	3.5	42
11...	492	320	88	812	7.6	29.5	10	2	5.0	65
18...	508	340	96	874	7.9	22.0	15	2	4.7	53
25...	502	310	85	826	7.9	22.0	15	2	3.1	35
SEP.										
01...	536	320	94	870	7.7	21.5	10	4	4.4	49
08...	384	260	80	640	7.6	23.5	20	4	4.0	46
15...	468	310	82	776	7.6	21.0	25	4	4.9	54
22...	482	310	98	774	7.7	20.5	30	4	5.4	59

03274000 GREAT MIAMI RIVER AT HAMILTON, OHIO

LOCATION.--Lat 39°23'28", long 84°34'20", in NE 1/4 sec. 6, T.1 N., R.3 E., Butler County, temperature recorder at gaging station on right bank, 1,000 ft downstream from Columbia Bridge at Hamilton, 3 miles downstream from Four Mile Creek, and 4.3 miles upstream from Pleasant Run.

DRAINAGE AREA.--3,630 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1950 to September 1951.
Water temperatures: October 1950 to September 1951, October 1957 to September 1971.

EXTREMES.--1970-71:
Water temperatures: Maximum, 29.0°C June 26, 27; minimum, 0.5°C Feb. 6, 7.

Period of record:
Water temperatures: Maximum, 34.0°C Aug. 16, 1965; minimum, freezing point on several days during December 1950, January and February 1951.

REMARKS.--Some regulation at low flow by industrial plants above station.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.5	21.0	18.5	18.5	14.0	12.5	3.0	2.5	2.5	2.0	3.5	3.5
2	21.0	20.5	18.5	16.5	14.0	13.5	3.5	3.0	2.0	2.0	4.0	3.5
3	20.5	20.0	16.5	16.0	14.0	14.0	4.0	3.5	2.0	2.0	4.0	4.0
4	20.5	19.0	16.5	16.0	14.0	13.0	4.0	3.0	2.0	1.0	4.5	4.0
5	19.5	19.0	16.5	15.5	13.0	12.0	3.0	2.5	1.0	1.0	4.5	4.5
6	19.5	19.0	15.5	15.5	12.5	10.5	2.5	2.0	1.0	0.5	4.5	4.5
7	19.5	19.0	15.5	15.5	10.5	9.5	2.0	1.5	1.0	0.5	4.5	4.5
8	20.0	19.5	15.5	15.5	9.5	9.5	1.5	1.5	1.0	1.0	4.5	3.5
9	20.5	20.0	16.0	15.5	9.5	9.5	1.5	1.5	1.0	1.0	3.5	3.5
10	20.5	20.0	15.5	15.5	10.0	9.5	1.5	1.5	1.0	1.0	4.0	3.5
11	20.5	19.5	16.0	16.0	11.0	10.0	2.0	1.5	2.0	1.0	4.0	4.0
12	19.5	19.5	16.5	16.0	11.0	11.0	2.5	2.0	3.0	2.0	4.5	4.0
13	19.5	19.5	16.5	16.5	11.0	10.5	3.0	2.5	2.5	2.0	5.0	4.5
14	20.0	19.5	16.5	16.0	10.5	9.5	4.5	3.0	2.0	1.0	6.5	5.0
15	20.5	19.5	16.0	14.0	9.5	9.0	4.5	4.5	1.0	1.0	7.5	6.5
16	19.5	18.5	14.0	13.0	9.0	8.5	4.5	4.0	2.5	1.0	7.5	7.5
17	18.5	17.5	13.0	12.5	9.5	8.0	3.5	3.5	3.0	1.5	7.5	7.0
18	17.5	17.0	12.5	12.5	8.5	8.0	3.5	3.0	1.5	1.0	7.0	6.5
19	17.0	17.0	12.5	12.5	9.5	9.5	3.0	2.5	1.0	1.0	6.5	6.0
20	17.0	17.0	13.0	12.5	8.5	8.5	2.5	2.0	1.0	1.0	6.0	5.5
21	17.0	17.0	13.0	13.0	8.5	7.5	2.5	2.0	1.0	1.0	6.0	5.5
22	17.0	17.0	13.0	13.0	7.5	7.0	3.0	2.5	1.0	1.0	6.0	5.5
23	17.0	17.0	12.5	10.0	7.0	7.0	3.5	3.0	1.5	1.0	6.0	6.0
24	17.5	17.0	10.0	9.5	7.0	5.5	4.0	3.5	1.5	1.5	5.5	5.5
25	18.5	17.5	8.5	8.0	5.5	5.0	4.5	4.5	1.5	1.5	6.5	5.5
26	19.0	19.0	8.5	8.0	5.0	3.5	4.5	4.5	2.5	1.5	7.5	6.5
27	19.5	19.5	10.0	8.5	3.5	3.0	4.5	2.5	3.5	2.5	8.0	7.5
28	19.5	19.5	11.5	10.0	3.0	2.5	2.5	2.0	3.5	3.5	9.0	8.0
29	19.5	19.5	12.0	11.5	2.5	2.0	2.0	2.0	---	---	9.0	9.0
30	19.5	18.5	12.5	12.0	2.5	2.0	2.5	2.5	---	---	9.5	9.0
31	18.5	18.5	---	---	2.5	2.5	2.5	2.5	---	---	10.5	9.5
MONTH	21.5	17.0	18.5	8.0	14.0	2.0	4.5	1.5	3.5	0.5	10.5	3.5

03274000 GREAT MIAMI RIVER AT HAMILTON, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.5	18.0	18.0	22.0	21.5	27.0	26.5	25.5	25.5	27.5	26.5
2	10.5	10.5	18.0	18.0	23.0	22.0	27.0	27.0	26.0	25.5	27.5	26.5
3	10.5	10.5	18.0	18.0	24.0	23.0	27.0	27.0	26.0	26.0	26.5	25.5
4	11.0	10.5	17.5	17.0	25.5	24.0	27.0	27.0	26.0	25.0	25.5	25.5
5	11.0	10.0	17.0	17.0	26.5	25.5	27.0	26.5	25.0	24.5	26.5	25.5
6	10.5	9.5	17.0	17.0	27.5	26.5	27.0	26.5	25.5	24.5	27.0	26.5
7	11.0	10.5	17.0	16.0	27.5	27.5	27.0	26.5	26.0	25.5	27.0	26.5
8	12.0	11.5	16.0	15.0	27.5	27.0	27.5	26.5	26.0	26.0	27.0	26.5
9	13.5	12.5	16.0	15.0	27.0	26.5	28.0	27.5	28.0	26.0	27.5	27.0
10	14.0	13.5	17.0	16.0	26.5	25.5	28.0	28.0	28.0	27.0	27.5	27.0
11	14.5	14.0	17.0	17.0	26.0	26.0	27.5	27.0	28.0	27.0	27.5	25.0
12	15.5	14.5	17.0	17.0	26.0	26.0	27.5	27.0	28.0	27.0	25.5	25.0
13	15.5	15.5	17.0	16.5	26.5	26.0	27.5	27.0	28.0	27.0	25.0	24.5
14	16.0	16.0	17.5	16.5	27.0	26.5	27.5	27.5	28.0	27.0	24.5	24.0
15	16.5	16.0	18.5	17.5	27.0	26.5	27.5	27.5	27.5	27.0	25.5	24.0
16	17.0	16.5	19.5	18.0	26.5	26.5	27.5	27.5	28.0	27.0	25.0	25.0
17	17.5	17.0	20.5	19.5	26.5	26.5	27.5	27.5	27.5	26.5	25.0	24.0
18	18.0	17.5	22.0	20.0	27.0	26.5	27.5	27.5	27.5	26.5	24.5	24.0
19	18.5	18.0	22.5	22.0	27.0	27.0	27.5	27.0	27.5	26.5	24.0	24.0
20	19.0	18.5	22.5	21.0	27.0	26.5	27.0	26.5	28.0	27.0	24.0	23.5
21	19.0	19.0	21.5	20.5	27.5	27.0	26.5	26.5	27.5	27.0	23.5	22.0
22	19.0	19.0	21.0	20.5	27.5	27.0	27.0	26.5	27.5	27.0	23.0	22.0
23	19.0	19.0	21.0	20.5	27.5	27.0	27.0	26.0	27.0	26.5	22.5	22.5
24	19.0	17.5	21.0	20.5	28.0	27.5	26.5	26.0	26.5	26.5	22.5	22.5
25	18.0	18.0	21.0	19.5	27.5	27.5	26.5	26.0	26.5	26.5	23.0	22.5
26	18.5	18.0	19.0	19.0	29.0	27.5	26.5	26.5	26.5	26.0	22.5	22.0
27	18.5	18.0	19.5	19.5	29.0	24.5	26.0	26.0	26.0	26.0	23.5	22.0
28	18.0	17.5	19.0	19.0	25.0	24.5	26.0	25.5	26.0	25.5	24.5	23.5
29	18.0	18.0	19.0	19.0	25.5	25.0	25.5	25.5	26.5	25.5	26.0	25.0
30	18.0	17.5	20.5	19.0	26.0	25.5	26.0	25.5	27.0	25.5	27.0	26.0
31	---	---	21.0	20.5	---	---	26.0	25.5	27.0	26.0	---	---
MONTH	19.0	9.5	22.5	19.0	29.0	21.5	28.0	25.5	28.0	24.5	27.5	22.0
YEAR	29.0	0.5										

03274050 GREAT MIAMI RIVER NEAR HAMILTON, OHIO

LOCATION.--Lat 39°20'00", long 84°36'42", Butler County, at American Materials Company private bridge near Hamilton, about 5.5 miles downstream from gaging station.

DRAINAGE AREA.--3,667 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRITE (NO2) (MG/L)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)
OCT.											
07...	1343	489	292	0	120	80	--	1.5	2.9	4.6	2.3
14...	1050	1050	282	0	96	66	.5	.80	3.8	4.4	4.8
21...	1410	1190	264	0	95	62	--	1.0	3.6	8.0	2.2
28...	1330	587	286	0	110	64	--	1.0	2.8	6.0	3.0
NOV.											
11...	1100	690	300	0	100	62	--	1.0	3.0	8.0	3.4
DEC.											
16...	1040	1190	272	0	89	52	--	1.5	.84	10	2.3
JAN.											
13...	1420	1320	296	0	96	50	--	.47	1.5	20	2.3
FEB.											
24...	1300	16900	124	0	36	20	.4	.09	.16	15	.34
MAR.											
31...	1425	1960	290	0	89	44	--	.35	.97	17	1.6
APR.											
28...	1345	1750	292	0	100	50	--	.71	.06	6.7	1.6
MAY											
26...	1125	2090	274	0	82	40	.4	.75	.45	13	1.6
JUNE											
30...	1150	2490	200	0	69	26	--	.94	.28	30	2.7
JULY											
07...	1400	976	262	0	93	36	--	.71	.06	23	1.7
14...	1145	958	222	0	86	42	--	.98	.58	8.7	1.1
21...	1400	521	284	0	110	58	--	1.6	.53	33	2.2
28...	1240	885	203	0	78	42	--	.78	.51	7.0	1.2
AUG.											
04...	1150	1000	254	0	97	52	--	.98	.18	6.7	3.3
11...	1420	572	270	0	100	60	1.0	1.1	.66	7.8	2.1
18...	1110	489	284	0	120	72	--	1.1	1.1	6.3	2.3
25...	1110	521	290	0	120	80	--	.88	.30	4.3	3.0
SEP.											
01...	1115	436	270	0	110	70	--	1.8	1.2	6.3	3.0
08...	1030	1320	240	0	84	52	--	.92	.46	9.0	2.1
15...	1120	566	262	0	90	60	--	.65	.56	8.0	1.9
22...	1130	812	276	0	95	66	--	.58	.16	7.3	3.2

DATE	TIME	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.										
14...	1050	30	66	0	22	6	0	0	.00	4
21...	1410	10	--	--	48	--	70	--	--	0
28...	1330	10	--	10	19	0	40	--	--	--
FEB.										
24...	1300	<0	35	0	44	40	20	20	.02	2
MAY										
26...	1125	110	90	0	15	14	140	0	.05	0
JULY										
14...	1145	10	--	--	14	--	30	--	--	6
21...	1400	00	--	--	7	--	40	--	--	0
AUG.										
11...	1420	30	110	0	8	8	70	10	--	2
18...	1110	10	--	--	5	--	90	--	--	4
SEP.										
08...	1030	100	--	--	3	--	50	--	--	3
15...	1120	10	--	--	6	--	50	--	--	3

03274050 GREAT MIAMI RIVER NEAR HAMILTON, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: July 1963 to September 1971.

REMARKS.--Samples for iron and manganese were filtered clear when collected. Samples were collected weekly October, July to September, and monthly November to June. Records of discharge are given for 03274000 Great Miami River at Hamilton, Ohio (drainage area 3,630 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	TUR-BID-ITY (JTU)	ODOR (THRES-HOLD NUMBER)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.										
07...	544	350	110	902	7.9	18.5	20	2	5.7	61
14...	474	310	78	820	7.8	21.0	35	4	4.0	44
21...	478	310	93	786	7.8	15.0	45	4	6.5	64
28...	502	340	100	856	7.6	19.5	--	--	3.6	39
NOV.										
11...	502	350	100	868	7.6	12.5	25	4	4.6	43
DEC.										
16...	438	330	106	755	7.7	8.5	20	4	7.9	67
JAN.										
13...	462	360	120	796	7.7	6.5	25	4	9.9	80
FEB.										
24...	208	160	58	344	7.7	3.0	150	4	12.8	95
MAR.										
31...	446	350	110	758	8.0	13.0	20	4	9.3	88
APR.										
28...	466	350	110	807	7.4	12.5	65	4	9.3	87
MAY										
26...	434	320	95	711	7.6	17.5	40	4	7.6	79
JUNE										
30...	340	250	86	514	7.3	27.5	70	4	6.3	79
JULY										
07...	462	320	100	695	7.7	29.0	25	2	8.0	100
14...	386	270	88	655	7.7	28.0	25	4	4.8	61
21...	486	340	110	817	7.6	27.0	15	8	7.0	89
28...	344	240	76	608	7.3	25.5	24	3	5.4	65
AUG.										
04...	450	300	92	752	7.7	24.0	20	4	3.1	36
11...	486	320	98	806	7.6	29.0	20	4	5.8	74
18...	544	330	97	876	7.7	23.0	20	2	4.5	52
25...	552	330	92	899	7.8	23.0	20	4	4.0	46
SEP.										
01...	506	320	90	857	7.5	23.0	10	4	4.1	47
08...	404	290	93	692	7.6	23.0	30	4	3.9	45
15...	450	290	75	747	7.5	22.5	25	4	3.6	41
22...	488	320	94	794	7.7	21.0	30	4	5.0	56

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO

LOCATION.--Lat 39°15'47", long 84°40'00", Hamilton County, at Blue Rock Road bridge at New Baltimore, about 6.5 miles downstream from Indian Creek, and 14 miles downstream from gaging station at Hamilton.

DRAINAGE AREA.--3,814 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1966 to September 1971.
Water temperatures: July 1966 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 960 micromhos Aug. 25; minimum, 250 micromhos Feb. 22.
Dissolved oxygen: Maximum, 15.0 mg/l Feb. 26, Mar. 8, June 9, 10; minimum, 0.0 mg/l June 27.
Water temperatures: Maximum, 31.0°C June 26, 27; minimum, freezing point Feb. 10, 11, 14-22.

Period of record:
Specific conductance (1967-69, 1970-71): Maximum, 1,150 micromhos Feb. 23, 1969; minimum, 230 micromhos May 24, 1968.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.								
01...	1600	--	--	--	--	--	--	--
12...	0800	474	288	0	140	76	1.1	11
16...	0800	853	247	11	100	58	.9	15
NOV.								
13...	0815	656	274	14	120	67	1.1	9.2
30...	0800	1200	251	15	100	51	.9	12
DEC.								
07...	0800	742	290	0	120	62	.6	16
25...	0830	2560	196	0	91	40	.4	19
JAN.								
15...	0815	1910	227	14	100	43	.7	23
29...	0900	735	290	10	140	57	.6	19
FEB.								
12...	0815	2080	236	0	96	73	.4	7.3
19...	0815	12700	128	0	37	25	.2	5.0
MAR.								
01...	0815	7730	180	0	62	23	.4	29
26...	0815	2570	240	13	91	38	.4	27
APR.								
30...	0800	1040	306	0	100	54	.7	4.1
MAY								
03...	0900	901	284	0	96	50	.6	9.6
21...	0810	2410	206	7	67	31	.4	22
JUNE								
11...	1330	--	--	--	--	--	--	--
25...	0815	614	266	0	120	55	.6	8.9
28...	0830	8520	138	0	36	13	.3	19
JULY								
23...	--	583	276	0	120	62	.6	7.8
29...	1300	1430	208	0	83	44	.4	9.7
29...	1315	--	--	--	--	--	--	--
AUG.								
03...	0930	621	226	10	100	55	.5	9.8
20...	0830	444	292	0	120	73	.7	8.8
SEP.								
03...	0830	705	250	0	110	66	.7	16
13...	1345	796	190	0	75	30	[illegible]	19

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO--Continued

EXTREMES.--Period of record--Continued
Dissolved oxygen (1967-68, 1970-71): Maximum, 15.0 mg/l Feb. 26, Mar. 8, June 9, 10, 1971; minimum, 0.0 mg/l June 27, 1971.
Water temperatures: Maximum, 33.0°C July 18, 1969; minimum, freezing point Jan. 5, 1969, Jan. 7, 8, 1970, Feb. 10, 11, 14-22, 1971.

REMARKS.--Continuous water-quality recorder operated since July 1966. Maximum recorded specific conductance value of 1,160 micromhos occurred Mar. 18, 1970. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater due to instrument limitation. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected three times during the year to further define the quality of water. Records of discharge are given for 03274000 Great Miami River at Hamilton, Ohio (drainage area 3,630 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
01...	--	--	--	--	--	6.0	1.0
12...	530	340	100	904	7.5	--	--
16...	450	310	88	778	8.5	--	--
NOV.							
13...	504	340	92	868	8.5	--	--
30...	434	320	89	754	8.6	--	--
DEC.							
07...	528	340	100	827	7.4	--	--
25...	350	250	90	569	8.2	--	--
JAN.							
15...	466	310	100	690	8.6	--	--
29...	542	360	100	857	8.4	--	--
FEB.							
12...	470	280	86	760	7.3	--	--
19...	236	140	35	354	6.9	--	--
MAR.							
01...	312	250	100	503	7.2	--	--
26...	422	330	110	709	8.5	--	--
APR.							
30...	462	340	88	798	8.1	--	--
MAY							
03...	482	330	97	783	7.3	--	--
21...	356	270	89	594	8.3	--	--
JUNE							
11...	--	--	--	--	--	10	16
25...	502	330	110	814	7.4	--	--
28...	218	170	57	372	8.1	--	--
JULY							
23...	488	360	130	825	7.4	--	--
29...	340	260	96	604	7.3	--	--
29...	--	--	--	--	--	--	1.7
AUG.							
03...	426	330	120	734	8.4	--	--
20...	550	360	120	884	7.8	--	--
SEP.							
03...	480	310	100	826	7.4	--	--
13...	352	240	78	610	7.4	--	--

GREAT MIAMI RIVER BASIN

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	840	800	800	780	750	720	---	---	---	---	510	420
2	810	770	800	780	770	700	---	---	---	---	590	490
3	780	740	780	700	770	730	---	---	---	---	690	590
4	790	760	780	740	780	730	---	---	---	---	710	600
5	820	790	750	730	790	750	---	---	590	420	700	650
6	830	820	760	730	820	790	---	---	---	---	680	550
7	840	820	760	730	820	790	---	---	---	---	630	550
8	850	820	760	740	820	760	---	---	---	---	680	610
9	860	830	800	740	780	740	---	---	580	470	650	550
10	850	830	820	790	---	---	---	---	630	560	780	600
11	850	820	810	770	---	---	---	---	670	590	720	630
12	---	---	860	770	840	770	---	---	810	580	700	550
13	---	---	870	830	850	780	---	---	740	550	650	580
14	---	---	880	850	870	820	---	---	780	700	650	500
15	---	---	880	820	870	780	---	---	750	590	520	490
16	---	---	860	810	830	670	---	---	620	500	600	540
17	---	---	850	820	690	640	---	---	660	300	600	540
18	---	---	860	830	---	---	---	---	370	260	610	550
19	---	---	870	770	---	---	---	---	370	290	650	580
20	---	---	800	690	---	---	---	---	400	310	690	650
21	710	650	750	700	---	---	---	---	390	300	730	670
22	710	670	---	---	---	---	---	---	390	250	760	650
23	720	690	---	---	---	---	---	---	420	350	800	730
24	740	700	---	---	---	---	---	---	420	340	790	740
25	740	710	---	---	---	---	---	---	470	400	780	730
26	730	680	---	---	---	---	---	---	500	430	800	710
27	880	700	760	730	---	---	---	---	560	480	780	660
28	900	750	750	710	---	---	---	---	510	440	740	640
29	790	780	750	710	---	---	---	---	---	---	750	670
30	810	780	750	710	---	---	---	---	---	---	740	650
31	820	790	---	---	---	---	---	---	---	---	740	600
MONTH	---	---	880	690	---	---	---	---	---	---	800	420

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	740	640	780	640	740	630	540	500	780	690	850	790
2	780	730	790	660	670	550	580	540	---	---	850	780
3	---	---	810	740	660	560	710	580	---	---	840	800
4	---	---	810	730	750	550	700	610	750	700	840	730
5	---	---	810	750	680	560	660	580	740	690	850	810
6	710	600	770	600	720	570	660	590	780	720	820	780
7	680	590	700	560	750	640	690	640	800	760	800	750
8	690	620	600	430	740	630	720	680	800	730	770	630
9	760	680	600	460	790	700	750	710	760	660	670	540
10	770	670	640	460	800	700	760	630	820	730	640	570
11	720	630	590	530	780	740	740	620	820	760	630	570
12	760	580	640	560	780	750	660	580	850	800	650	430
13	670	600	660	580	770	740	620	520	860	770	620	530
14	690	600	680	550	790	660	660	540	860	800	740	620
15	670	620	660	540	800	700	690	620	870	800	760	670
16	750	630	660	540	760	560	730	680	860	780	800	700
17	710	630	660	470	800	750	780	730	890	770	800	790
18	710	650	650	470	800	760	780	750	930	860	840	720
19	770	710	690	540	800	750	790	760	940	860	840	820
20	760	620	690	450	810	740	800	730	900	830	820	570
21	800	720	640	560	820	780	800	730	880	850	800	630
22	810	700	680	570	840	780	800	720	880	840	780	690
23	810	710	710	630	840	790	820	740	900	850	790	760
24	820	740	710	660	830	770	780	720	920	840	770	690
25	800	720	700	630	800	740	830	730	960	760	690	660
26	830	720	720	660	780	700	840	710	870	760	690	510
27	840	780	710	630	790	510	710	560	830	770	650	610
28	630	740	730	680	600	360	560	600	810	750	700	640
29	800	720	730	630	670	390	700	560	810	750	720	690
30	810	740	680	610	520	400	720	680	830	770	770	690
31	---	---	760	630	---	---	760	700	900	780	---	---
MONTH	840	580	810	430	840	360	840	500	960	660	850	430
YEAR	960	250										

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	6.2	3.0	2.2	4.4	3.5	---	---	---	---	10.5	6.3
2	6.5	2.7	3.2	2.5	4.8	3.7	---	---	---	---	11.7	7.4
3	4.4	2.2	3.4	2.8	5.2	4.5	---	---	---	---	13.0	6.5
4	4.2	2.2	3.2	3.0	6.0	4.8	---	---	---	---	8.4	5.2
5	4.2	2.3	---	---	5.9	5.3	---	---	9.7	8.8	13.5	5.6
6	---	---	---	---	5.7	5.3	---	---	---	---	10.0	6.4
7	3.7	2.1	---	---	6.1	5.3	---	---	---	---	13.3	7.0
8	3.0	2.2	---	---	6.0	5.0	---	---	---	---	15.0	7.0
9	2.8	1.7	---	---	5.4	4.9	---	---	12.1	10.2	10.9	5.7
10	3.0	2.2	---	---	---	---	---	---	12.6	11.2	12.5	5.6
11	3.3	0.5	8.1	2.0	---	---	---	---	12.0	8.2	12.0	5.5
12	---	---	3.8	2.9	6.7	6.2	---	---	10.0	7.7	6.2	1.3
13	---	---	3.4	3.0	8.4	6.5	---	---	11.4	8.4	3.4	0.4
14	---	---	3.9	3.2	8.8	7.9	---	---	11.3	8.7	4.5	1.3
15	---	---	4.5	3.9	9.0	7.8	---	---	9.0	6.8	2.8	2.5
16	---	---	4.5	4.0	9.3	8.5	---	---	7.4	5.2	9.8	7.5
17	---	---	5.0	4.3	10.4	9.2	---	---	10.0	5.7	8.5	7.0
18	---	---	5.2	4.7	---	---	---	---	10.8	7.3	7.3	5.2
19	---	---	5.2	4.5	---	---	---	---	7.9	6.2	5.9	4.2
20	---	---	5.1	4.7	---	---	---	---	8.0	6.0	4.3	3.0
21	5.7	4.5	5.3	4.6	---	---	---	---	8.4	7.8	3.1	2.7
22	6.7	4.5	---	---	---	---	---	---	11.2	7.5	10.3	9.9
23	6.6	5.6	---	---	---	---	---	---	10.9	9.3	10.6	8.6
24	6.6	5.7	---	---	---	---	---	---	10.8	9.1	10.4	8.2
25	6.2	6.0	---	---	---	---	---	---	10.2	7.5	11.4	8.8
26	6.0	4.6	---	---	---	---	---	---	15.0	8.6	10.9	7.6
27	6.6	2.5	8.2	6.0	---	---	---	---	10.7	8.0	9.3	6.6
28	4.0	3.1	6.3	5.7	---	---	---	---	10.9	7.4	7.5	6.4
29	4.3	1.9	5.9	5.5	---	---	---	---	---	---	13.6	6.6
30	2.6	1.8	5.9	4.3	---	---	---	---	---	---	11.2	8.2
31	2.8	2.1	---	---	---	---	---	---	---	---	10.0	5.9
MONTH	---	---	---	---	---	---	---	---	---	---	15.0	0.4

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.4	6.4	8.0	4.9	10.5	4.7	2.7	2.1	5.9	2.0	4.2	3.5
2	8.1	7.3	7.9	3.7	5.3	2.1	5.1	2.4	---	---	3.6	2.9
3	---	---	8.0	3.9	4.9	1.0	5.7	3.9	---	---	2.9	2.4
4	---	---	6.4	4.0	4.9	2.0	7.5	4.4	2.8	2.2	3.2	2.4
5	---	---	4.7	2.5	7.1	1.6	6.5	5.6	3.8	2.4	3.8	2.7
6	10.8	4.4	3.6	1.7	10.1	2.2	7.2	4.8	5.5	2.7	4.0	2.9
7	4.5	3.0	5.7	3.6	9.4	3.0	6.2	3.9	6.0	2.6	3.5	3.0
8	7.0	3.0	7.0	5.7	11.5	1.2	6.0	3.2	6.4	2.9	4.1	2.7
9	6.7	4.9	7.0	5.7	15.0	6.3	5.2	3.7	8.5	3.7	4.3	2.8
10	7.4	5.4	6.2	3.5	15.0	3.4	3.9	2.2	8.3	3.3	4.5	3.2
11	7.9	5.4	4.7	3.5	7.7	4.5	2.6	1.6	7.9	2.7	4.0	3.0
12	8.3	7.3	5.0	4.2	6.2	2.6	3.9	2.2	7.9	3.0	3.7	3.2
13	10.3	8.0	5.1	---	5.7	2.2	4.2	2.5	9.1	3.2	3.8	3.6
14	10.0	7.3	6.5	5.3	6.1	1.8	4.8	2.7	9.1	3.8	4.1	3.4
15	8.9	6.7	5.7	5.1	3.8	2.9	7.9	3.0	6.9	3.1	4.4	3.4
16	8.2	6.5	5.8	5.0	5.4	2.8	6.4	2.4	7.1	3.1	4.1	3.5
17	6.5	4.9	6.3	4.7	9.1	2.4	6.7	2.2	7.6	3.8	3.9	3.5
18	5.9	3.9	7.2	4.9	9.0	3.3	3.4	2.7	8.4	3.7	4.5	3.5
19	6.9	3.5	8.1	4.7	4.5	1.9	4.8	1.9	8.5	4.0	4.5	3.9
20	6.0	4.5	7.0	5.2	4.3	1.0	5.8	2.3	8.0	4.0	4.4	3.7
21	10.7	3.5	6.5	5.5	3.6	1.3	7.4	2.4	8.2	3.8	4.2	3.4
22	8.5	3.5	8.5	6.4	6.1	0.7	8.4	3.0	5.5	3.4	4.4	3.5
23	9.3	3.5	9.7	6.3	6.2	1.1	8.9	3.2	6.2	2.9	4.3	3.7
24	5.6	3.9	10.8	6.7	5.0	0.9	4.8	1.8	7.7	3.4	5.5	3.5
25	5.5	3.5	8.4	4.1	5.0	0.9	3.0	1.3	7.1	3.7	5.1	4.5
26	11.0	3.5	6.9	5.8	5.7	0.1	2.1	1.4	7.0	2.4	4.0	3.0
27	11.4	10.6	6.4	5.1	2.6	0.0	3.9	1.6	4.4	3.3	3.9	3.1
28	10.4	8.8	9.9	6.0	3.7	2.9	4.9	2.1	4.3	3.1	3.9	3.2
29	10.1	6.7	8.9	6.0	3.4	2.6	4.0	1.5	5.0	3.3	3.8	2.9
30	10.4	4.9	7.7	5.4	2.8	2.2	2.8	1.8	5.0	3.6	3.8	2.2
31	---	---	12.3	5.2	---	---	3.0	1.4	4.9	3.7	---	---
MONTH	11.4	3.0	12.3	1.7	15.0	0.0	8.9	1.3	9.1	2.0	5.5	2.2
YEAR	15.0	0.0										

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.5	20.0	18.5	15.0	13.0	10.0	---	---	---	---	9.0	5.5
2	23.5	20.0	16.0	14.0	13.0	11.0	---	---	---	---	10.0	7.5
3	22.0	19.0	14.0	13.5	12.5	10.5	---	---	---	---	9.5	8.5
4	21.0	18.0	14.0	13.0	12.0	9.5	---	---	---	---	9.5	7.0
5	21.0	17.0	13.5	12.0	10.5	8.0	---	---	4.0	1.5	9.5	7.0
6	21.5	18.0	15.0	11.5	8.5	5.5	---	---	---	---	9.0	7.0
7	21.5	18.5	15.5	12.0	6.0	3.5	---	---	---	---	9.0	7.0
8	21.5	19.5	15.5	12.0	7.0	4.0	---	---	---	---	7.5	4.0
9	22.0	20.0	15.0	12.0	5.5	4.0	---	---	1.5	0.5	4.5	3.0
10	22.0	19.5	14.5	13.0	---	---	---	---	1.0	0.0	4.5	3.5
11	21.0	19.0	14.5	12.0	---	---	---	---	2.0	0.0	5.0	3.5
12	---	---	15.5	12.0	10.0	8.5	---	---	4.5	1.5	6.0	1.0
13	---	---	16.0	13.5	10.5	9.5	---	---	3.0	1.0	5.5	4.0
14	---	---	14.5	11.5	11.0	7.0	---	---	1.5	0.0	7.0	4.5
15	---	---	12.0	10.0	9.5	5.5	---	---	1.5	0.0	8.0	7.0
16	---	---	11.5	8.0	9.5	7.5	---	---	3.0	0.0	10.0	8.0
17	---	---	10.0	8.0	11.5	8.0	---	---	4.0	0.0	9.0	7.0
18	---	---	10.5	8.5	---	---	---	---	1.5	0.0	9.0	7.0
19	---	---	10.5	9.0	---	---	---	---	0.0	0.0	9.5	8.0
20	---	---	11.5	9.5	---	---	---	---	1.5	0.0	9.0	7.5
21	16.5	14.5	13.0	6.5	---	---	---	---	0.5	0.0	7.5	6.5
22	18.0	15.5	---	---	---	---	---	---	5.5	0.0	10.0	7.0
23	18.0	16.0	---	---	---	---	---	---	6.0	4.5	9.0	7.0
24	18.0	16.0	---	---	---	---	---	---	5.0	3.5	9.5	6.5
25	18.0	16.5	---	---	---	---	---	---	6.5	1.5	9.0	5.5
26	19.5	17.0	---	---	---	---	---	---	8.5	5.0	11.5	7.5
27	20.0	16.5	8.5	7.0	---	---	---	---	11.5	8.0	11.5	8.0
28	19.5	18.5	10.0	6.0	---	---	---	---	9.5	6.0	11.5	9.0
29	18.5	17.0	10.5	8.5	---	---	---	---	---	---	11.5	8.5
30	19.0	16.5	11.0	9.5	---	---	---	---	---	---	10.0	6.5
31	18.5	16.0	---	---	---	---	---	---	---	---	11.5	9.0
MONTH	---	---	18.5	6.0	---	---	---	---	---	---	11.5	1.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	9.5	15.5	12.0	23.0	18.5	28.5	27.0	26.0	24.5	28.5	26.0
2	13.5	11.5	16.5	12.5	23.0	19.5	28.0	27.0	---	---	---	27.0
3	12.5	10.0	17.5	14.0	23.5	20.5	28.0	26.0	---	---	---	---
4	13.0	10.5	18.5	13.5	25.0	21.5	28.0	26.0	26.5	24.0	---	---
5	13.0	10.5	18.0	16.5	26.5	23.0	28.0	26.0	26.5	24.0	---	---
6	13.0	9.0	20.0	15.0	28.0	24.0	27.0	26.0	25.5	24.0	---	---
7	13.0	9.5	17.0	15.5	28.5	25.0	29.0	27.0	27.0	25.0	29.0	26.5
8	13.5	9.5	17.0	13.0	28.5	24.5	28.5	27.5	27.5	25.5	29.0	28.0
9	15.0	12.0	17.5	13.5	28.5	25.0	29.5	28.5	28.5	25.5	28.5	28.0
10	16.0	12.0	19.0	14.0	26.5	24.5	28.5	26.0	28.5	26.0	29.0	28.0
11	17.0	11.0	19.0	16.5	26.5	26.0	28.0	27.0	29.0	27.0	28.5	26.0
12	17.5	12.5	20.0	17.5	27.0	26.0	27.5	26.0	28.5	26.5	26.0	24.0
13	17.0	12.5	18.5	15.5	28.0	26.5	28.5	27.5	29.0	26.0	25.0	24.0
14	17.5	13.5	17.5	14.5	28.0	26.0	29.0	27.5	29.0	26.5	26.5	23.5
15	17.0	11.0	18.0	15.5	27.0	25.5	29.0	28.0	29.5	26.5	27.0	24.0
16	17.0	12.0	20.0	17.0	28.0	25.5	28.0	27.5	28.5	26.0	25.5	22.0
17	15.5	12.5	21.0	17.0	29.0	27.0	28.0	27.5	29.5	25.5	24.5	21.5
18	17.5	15.5	22.0	15.5	29.5	27.5	28.0	26.5	28.5	26.5	24.0	22.5
19	18.5	14.5	24.5	19.5	29.0	27.0	28.0	26.5	28.0	26.0	23.5	22.0
20	19.5	14.0	24.5	19.5	29.0	27.0	27.5	26.0	27.5	26.0	26.0	22.0
21	20.5	16.5	23.5	20.0	30.0	28.0	28.0	26.0	28.5	26.0	25.0	23.0
22	20.0	14.5	22.0	19.0	29.5	28.0	29.0	26.0	26.5	24.0	24.5	22.0
23	19.5	14.0	21.5	19.0	29.5	27.5	29.0	27.0	---	23.5	24.0	22.5
24	20.0	15.5	21.5	17.0	30.0	28.0	28.0	27.0	---	---	23.0	21.0
25	19.0	15.0	21.5	18.5	30.0	28.5	29.0	27.0	27.5	26.0	22.0	20.0
26	19.0	15.5	21.0	18.0	31.0	28.0	29.0	28.0	27.5	24.5	22.0	19.0
27	19.0	16.5	21.0	16.5	31.0	25.0	28.5	27.0	27.0	25.0	23.0	18.0
28	19.5	15.5	20.5	14.5	27.0	26.0	27.5	26.5	26.5	24.5	25.0	22.0
29	19.5	16.0	20.0	16.5	27.5	25.5	27.5	26.0	27.5	24.0	27.0	24.5
30	17.5	14.5	20.0	15.5	28.0	27.0	27.0	25.0	26.0	25.0	27.5	25.5
31	---	---	23.5	17.0	---	---	26.0	24.0	26.5	25.5	---	---
MONTH	20.5	9.0	24.5	12.0	31.0	18.5	29.5	24.0	29.5	23.5	29.0	18.0
YEAR	31.0	0.0										

03276600 GREAT MIAMI RIVER AT ELIZABETHTOWN, OHIO

LOCATION.--Lat 39°09'11", long 84°47'38", Hamilton County, at Lost Bridge on Lawrenceburg Road, 0.6 mile southeast of Elizabethtown, 0.9 downstream from Whitewater River, and 5.4 miles upstream from mouth.

DRAINAGE AREA.--5,356 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1971.
Water temperatures: October 1956 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum daily, 926 micromhos Feb. 2; minimum daily, 364 micromhos Feb. 24.
Water temperatures: Maximum, 30.0°C June 25-29, July 11; minimum, 1.0°C Jan. 30, Feb. 1, 2, 11, 12, 14, 15.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.									
10...	1630	--	--	296	0	124	63	.4	13
15...	1450	520	77	--	--	--	--	--	--
19...	1130	--	--	244	15	97	49	.3	11
30...	1636	--	--	249	12	122	63	.3	9.6
NOV.									
07...	1630	--	--	286	0	129	63	.4	13
14...	1630	--	--	260	14	117	57	.4	10
21...	1630	--	--	222	12	82	47	.3	13
24...	1345	390	87	--	--	--	--	--	--
DEC.									
11...	1515	--	--	259	17	97	49	.4	16
14...	1630	--	--	275	11	100	57	.5	21
22...	1630	--	--	229	0	73	29	.7	8.3
24...	1235	130	62	--	--	--	--	--	--
JAN.									
06...	1630	--	--	234	11	63	23	.4	18
14...	1300	250	62	--	--	--	--	--	--
19...	1600	--	--	253	18	94	55	.6	17
30...	1630	--	--	278	14	120	78	.7	21
FEB.									
02...	1630	--	--	310	0	120	80	.8	14
10...	1630	--	--	196	0	62	42	.4	10
19...	1330	270	120	--	--	--	--	--	--
24...	1530	--	--	134	0	37	18	.3	15
MAR.									
01...	1530	--	--	184	0	46	24	.4	32
05...	1630	--	--	237	0	64	40	.4	28
18...	1315	190	120	--	--	--	--	--	--
30...	1630	--	--	285	0	95	40	.4	27
APR.									
02...	1630	--	--	253	11	92	41	.4	16
14...	1300	380	100	--	--	--	--	--	--
22...	1530	--	--	294	0	96	44	.5	9.1
28...	1545	--	--	300	0	110	50	.5	7.5
MAY									
06...	1715	--	--	296	0	100	50	.6	11
17...	1430	--	--	241	8	92	37	.5	34
21...	1430	--	--	225	0	74	32	.5	16
25...	1245	130	220	--	--	--	--	--	--
JUNE									
10...	1230	80	59	--	--	--	--	--	--
20...	1715	--	--	198	0	66	32	.5	14
21...	1700	--	--	250	13	80	45	.6	15
28...	1715	--	--	256	12	91	48	.6	15
JULY									
14...	1300	220	310	--	--	--	--	--	--
20...	1645	--	--	262	0	110	54	.7	14
26...	1430	--	--	274	0	95	56	.8	7.3
31...	1245	--	--	180	6	74	41	.6	9.0
AUG.									
04...	1740	--	--	192	0	74	38	.6	12
12...	1400	230	220	--	--	--	--	--	--
23...	1030	--	--	260	8	110	58	.7	17
25...	1500	--	--	248	0	97	48	.7	14
SEP.									
04...	1507	--	--	242	0	95	54	.6	7.1
08...	1330	60	0	--	--	--	--	--	--
13...	1030	--	--	198	0	77	42	.5	12
30...	1500	--	--	285	0	95	52	.5	9.7

03276600 GREAT MIAMI RIVER AT ELIZABETHTOWN, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance: Maximum daily, 1,090 micromhos Jan. 6, 1964; minimum daily, 206 micromhos Jan. 28, 1962.
Water temperatures: Maximum, 32.0°C July 23-27, Aug. 3, 1964, July 3, 1966; minimum, freezing point on several days during winter periods of most years.

REMARKS.--Samples for iron and manganese were filtered clear when collected. Daily samples were collected at this station and samples were selected for analysis on the following basis: (1) Maximum daily specific conductance for each month, (2) minimum daily specific conductance for each month, (3) median daily specific conductance for each month, and (4) special sample each month to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.								
10...	1.4	502	340	97	840	7.6	--	--
15...	--	--	--	--	--	--	5.0	55
19...	1.2	428	300	74	704	8.6	--	--
30...	1.9	486	320	96	811	8.6	--	--
NOV.								
07...	1.6	504	340	100	834	7.4	--	--
14...	1.7	480	330	93	794	8.5	--	--
21...	2.1	426	300	98	681	8.4	--	--
24...	--	--	--	--	--	--	11.6	88
DEC.								
11...	1.9	480	340	99	770	8.6	--	--
14...	2.5	518	350	110	831	8.4	--	--
22...	1.8	360	260	72	567	7.1	--	--
24...	--	--	--	--	--	--	9.2	74
JAN.								
06...	.72	372	290	79	581	8.5	--	--
14...	--	--	--	--	--	--	10.6	85
19...	1.8	494	340	102	772	8.7	--	--
30...	1.1	574	360	108	905	8.6	--	--
FEB.								
02...	1.2	570	360	106	926	7.7	--	--
10...	.65	348	230	70	570	7.2	--	--
19...	--	--	--	--	--	--	12.6	95
24...	.76	240	160	50	364	8.0	--	--
MAR.								
01...	.79	286	240	89	511	7.4	--	--
05...	.77	384	290	96	644	7.5	--	--
18...	--	--	--	--	--	--	8.6	76
30...	1.3	412	340	110	720	7.9	--	--
APR.								
02...	1.4	410	320	94	695	8.4	--	--
14...	--	--	--	--	--	--	10.0	100
22...	1.3	448	330	88	731	7.4	--	--
28...	.95	466	340	94	766	7.3	--	--
MAY								
06...	1.3	442	340	97	782	7.2	--	--
17...	1.3	396	320	110	688	8.4	--	--
21...	.93	348	260	75	592	8.2	--	--
25...	--	--	--	--	--	--	7.4	81
JUNE								
10...	--	--	--	--	--	--	5.4	67
20...	.84	330	230	68	554	8.1	--	--
21...	1.4	422	320	93	712	8.4	--	--
28...	1.6	460	340	110	765	8.3	--	--
JULY								
16...	--	--	--	--	--	--	8.6	110
20...	1.0	438	340	120	758	7.4	--	--
26...	1.7	488	320	95	765	7.4	--	--
31...	1.3	338	240	82	556	8.3	--	--
AUG.								
04...	1.2	316	240	82	556	8.3	--	--
12...	--	--	--	--	--	--	10.0	120
23...	1.2	452	330	120	792	7.3	--	--
25...	1.7	462	300	100	717	8.1	--	--
SEP.								
04...	1.6	426	400	81	723	7.3	--	--
08...	--	--	--	--	--	--	4.0	51
13...	1.2	350	230	76	583	8.2	--	--
30...	2.1	466	310	76	768	7.6	--	--

03276600 GREAT MIAMI RIVER AT ELIZABETHTOWN, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
(ONCE-DAILY MEASUREMENT USUALLY BETWEEN 1400 AND 1700)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	828	789	774	757	924	511	709	768	727	---	569	726
2	815	793	766	772	926	541	695	740	727	---	560	713
3	814	830	762	636	880	542	709	740	730	---	569	722
4	811	811	780	594	876	636	702	736	716	---	556	723
5	798	811	776	592	896	644	713	772	730	658	567	720
6	814	794	794	581	406	643	726	782	771	656	558	760
7	808	834	794	588	429	659	723	558	771	654	567	762
8	814	800	797	746	406	660	747	563	724	620	560	760
9	832	784	790	---	570	627	731	637	724	621	---	684
10	840	798	786	---	570	619	748	630	700	620	788	686
11	829	798	778	---	570	618	745	637	721	619	790	602
12	792	811	785	---	665	676	718	665	718	620	779	592
13	795	807	801	720	663	672	718	654	732	618	790	583
14	805	794	831	723	663	680	718	678	713	758	776	594
15	763	796	806	702	663	566	726	673	683	760	786	594
16	706	798	808	718	662	561	716	677	682	758	781	765
17	723	794	674	787	659	593	736	688	667	762	781	765
18	707	804	764	787	657	599	723	690	671	748	783	765
19	704	809	---	772	657	685	733	676	568	762	781	703
20	714	815	768	789	368	684	739	678	554	758	783	703
21	732	681	753	794	372	612	734	592	712	760	786	734
22	745	682	567	807	372	617	731	593	572	742	786	736
23	746	---	704	802	380	605	725	593	724	760	792	728
24	758	794	694	807	364	685	747	704	724	758	777	611
25	742	776	795	828	398	718	745	700	760	753	717	613
26	757	790	---	811	389	718	763	690	762	765	718	610
27	750	776	---	826	398	720	765	696	764	764	707	729
28	753	778	794	828	509	713	766	696	765	765	715	726
29	832	783	795	832	---	720	740	723	572	765	715	736
30	811	766	771	905	---	720	761	720	572	765	714	768
31	810	---	764	905	---	720	---	722	---	556	713	---
MONTH	779	790	767	756	582	644	732	680	699	709	709	697
YEAR	712											

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
(ONCE-DAILY MEASUREMENT USUALLY BETWEEN 1400 AND 1700)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	16.0	11.0	2.0	1.0	7.0	12.0	18.0	26.0	---	23.5	26.0
2	26.0	15.0	13.0	4.0	1.0	7.0	12.0	17.0	28.0	---	23.0	26.0
3	26.0	15.0	13.0	6.0	2.0	6.0	12.0	17.0	28.0	---	24.0	26.0
4	25.0	16.0	10.0	4.0	2.0	7.0	12.0	17.0	28.0	---	23.0	26.0
5	25.0	17.0	8.0	3.0	2.0	7.0	12.0	16.0	29.0	27.0	23.0	26.0
6	25.0	16.0	7.0	2.0	3.0	7.0	12.0	16.0	29.0	27.0	26.0	26.0
7	19.0	16.0	6.0	2.0	3.0	4.5	14.0	11.0	28.0	29.0	25.0	27.0
8	19.0	14.0	5.0	4.0	3.0	4.5	14.0	12.0	26.0	28.0	26.0	27.0
9	19.0	13.0	7.0	---	2.0	4.5	14.0	14.0	26.0	28.0	---	27.0
10	18.0	14.0	7.0	---	2.0	5.0	14.0	19.0	26.0	28.0	27.0	27.0
11	18.0	13.0	10.0	---	1.0	5.0	15.0	19.0	26.0	30.0	28.0	27.0
12	18.0	17.0	8.0	---	1.0	5.0	18.0	17.0	28.0	29.5	26.0	26.0
13	19.0	15.0	8.0	7.0	2.0	10.0	18.0	17.0	29.0	29.5	27.0	24.0
14	20.0	13.0	8.0	6.0	1.0	11.0	18.0	19.0	29.0	29.0	27.0	24.0
15	18.0	10.0	8.0	4.0	1.0	10.0	18.5	18.0	29.0	29.0	28.0	24.0
16	17.0	9.0	7.0	6.0	3.0	11.0	18.0	20.0	28.0	29.5	28.0	23.5
17	15.0	10.0	7.0	5.5	5.0	7.0	21.0	22.0	28.0	29.5	27.0	24.5
18	17.0	9.0	8.0	4.0	5.0	8.0	21.0	22.0	28.0	29.5	28.0	23.0
19	15.0	10.0	6.0	4.0	5.0	4.5	20.0	23.0	27.0	29.0	28.0	20.0
20	14.0	10.0	4.0	4.0	4.5	4.0	22.5	23.5	27.0	29.0	28.0	21.0
21	15.0	9.0	9.0	2.0	4.0	5.0	22.0	22.5	28.0	29.5	28.0	19.0
22	17.5	9.0	9.0	2.0	3.0	7.0	19.5	22.5	27.0	29.5	28.0	20.0
23	18.0	8.0	3.0	3.0	4.0	6.0	19.5	22.0	28.0	29.5	28.0	21.0
24	18.0	9.0	5.5	3.0	4.0	7.0	18.0	21.0	28.0	28.0	28.0	20.0
25	18.0	10.0	7.0	4.0	4.5	12.0	18.0	21.0	30.0	29.0	28.0	20.5
26	18.0	9.0	3.0	4.5	5.0	10.0	19.0	19.5	30.0	27.0	27.0	---
27	18.0	9.0	4.0	5.0	4.0	9.5	17.0	19.5	30.0	27.0	28.0	26.0
28	17.5	9.0	4.0	2.0	4.5	11.0	17.0	19.5	30.0	29.0	28.0	26.0
29	15.0	9.5	4.0	2.0	---	11.0	18.0	22.0	30.0	29.0	28.0	26.0
30	15.0	11.0	3.0	1.0	---	12.0	18.0	23.0	28.0	29.0	28.0	26.0
31	15.0	---	2.0	2.0	---	12.0	---	25.0	---	26.5	28.0	---
MONTH	18.5	12.0	7.0	3.5	3.0	7.0	17.0	19.0	28.0	28.0	26.0	24.5
YEAR	15.5											

STREAMS TRIBUTARY TO LAKE ERIE

04181050 ST. MARYS RIVER AT WILSHIRE, OHIO

LOCATION.--Lat 40°45'07", long 84°47'36", in SW 1/4 NE 1/4 sec.30, T.3 S., R.1 E., First principal meridian, at bridge on New York, Chicago, and St. Louis Railroad at northeast edge of Wilshire, 1 mile upstream from Ohio-Indiana State line.

DRAINAGE AREA.--435 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1971.

REMARKS.--Samples collected bi-monthly by the Indianapolis, Indiana district office as part of the Environmental Protection Agency national network.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	ORGANIC NITRO-GEN (N) (MG/L)	NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL RESI-DUE (MG/L)
OCT.								
08...	1230	1.2	.3	.08	.28	482	98	580
DEC.								
02...	1245	.08	2.7	.03	.83	502	46	548
FEB.								
04...	1500	1.9	3.0	1.2	.40	160	140	300
APR.								
08...	1245	1.0	2.6	.05	.29	492	66	558
JUNE								
01...	1230	1.4	10	.08	.61	422	192	614
AUG.								
04...	1145	.92	1.0	.02	.39	480	170	650

DATE	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	IMME-DIATE COLI-FORM (COL. PER 100 ML)
OCT.							
08...	670	7.6	18.0	23	8.2	86	6000
DEC.							
02...	750	7.6	7.5	15	6.4	53	3000
FEB.							
04...	260	7.6	.5	50	14.0	97	24000
APR.							
08...	720	8.0	9.0	6	--	--	560
JUNE							
01...	600	7.7	18.5	15	7.0	74	1900
AUG.							
04...	790	7.9	20.5	10	8.1	89	4700

04183500 MAUMEE RIVER AT ANTWERP, OHIO

LOCATION.--Lat 41°11'56", long 84°44'40", in sec.22, T.3 N., R.1 E., Paulding County, at gaging station on left bank 425 ft downstream from bridge on State Highway 49, 1 mile north of Antwerp, 7 miles downstream from Indiana State line, and 10 miles upstream from Marie DeLarme Creek.

DRAINAGE AREA.--2,129 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	ORGANIC NITRO-GEN (N) (MG/L)	NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL RESI-DUE (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)
OCT.										
08...	1030	137	1.1	5.4	.20	1.3	498	62	560	720
21...	1400	370	1.9	6.0	.04	.72	418	140	558	700
NOV.										
04...	1345	500	1.6	4.6	.21	.96	484	76	560	800
18...	1050	412	1.4	4.8	.17	.80	498	46	544	795
DEC.										
02...	1430	2330	.47	9.8	.13	.50	380	118	498	580
22...	1230	1390	.70	7.4	.06	.060	438	282	720	690
JAN.										
05...	1230	955	.00	5.3	.73	.90	504	44	548	840
19...	1335	403	.00	3.1	1.1	.94	588	32	620	916
FEB.										
04...	1245	430	.00	3.1	1.3	3.4	744	52	796	1100
16...	1600	2930	1.2	2.5	.79	.52	288	80	368	480
MAR.										
02...	1240	4800	1.2	5.0	.46	.35	242	96	338	400
23...	1130	3130	.77	7.5	.00	.27	300	120	420	528
APR.										
08...	1030	800	.00	3.3	.26	.60	414	80	404	660
20...	1400	955	.00	1.0	.00	.53	434	82	516	700
MAY										
06...	1300	1680	1.7	7.2	.26	.040	382	658	1040	570
19...	1300	630	1.8	6.0	.00	.60	464	68	532	700
JUNE										
01...	1400	1190	1.7	10	.08	.40	362	178	540	520
17...	1415	596	1.7	5.3	.08	.87	478	64	542	750
29...	1200	302	.19	1.8	.08	.67	448	72	520	700
JULY										
13...	1430	835	1.1	2.3	.00	.91	372	78	450	625
21...	1030	220	4.3	5.1	.00	.66	374	80	454	530
AUG.										
04...	1400	180	.00	1.9	.08	1.3	520	112	632	800
17...	1045	391	.85	1.0	.02	.91	466	60	526	750
31...	1115	113	.00	1.2	.09	1.7	508	116	624	800
SEP.										
14...	1215	200	--	--	--	--	464	--	--	720
14...	1300	223	1.2	2.4	.00	.73	442	108	550	750

DATE	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BARIUM (BA) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
DEC.										
22...	0	0	41	--	11	340	180	25	11	76
MAR.										
23...	14	0	3	0	8	3	12	18	2	60
JUNE										
17...	0	0	2	0	8	5	20	6	0	30

04183500 MAUMEE RIVER AT ANTWERP, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: October 1948 to September 1949, water years 1966-67 (partial-record station); October 1969 to September 1971.
Water temperatures: October 1948 to September 1949.

REMARKS.--Samples collected bi-weekly by the Indianapolis, Indiana district office as part of the Environmental Protection Agency national network.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	PH (UNITS)	TEMP-ERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	IMME-DIATE COLI-FORM (COL. PER 100 ML)	PHENOLS (UG/L)	CYANIDE (CN) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.									
08...	7.8	16.0	20	8.4	84	4000	2	--	--
21...	8.2	13.0	22	9.7	92	--	--	--	--
NOV.									
04...	7.8	9.0	23	8.7	75	2200	0	--	--
18...	7.2	7.0	10	8.8	72	--	--	--	--
DEC.									
02...	8.0	7.0	30	10.0	82	1400	1	--	--
22...	--	2.5	20	12.8	94	--	--	.00	.3
JAN.									
05...	7.8	.0	12	12.2	84	7200	0	--	--
19...	9.3	.0	15	11.7	80	--	--	--	--
FEB.									
04...	7.8	.0	10	14.2	97	900	0	--	--
16...	7.8	.0	35	10.8	74	--	--	--	--
MAR.									
02...	8.0	2.0	25	12.4	90	2400	4	--	--
23...	6.9	4.0	20	11.0	84	--	--	.02	.2
APR.									
08...	7.5	7.0	12	14.0	115	420	0	--	--
20...	8.5	15.0	15	11.7	120	--	--	--	--
MAY									
06...	7.9	12.0	20	8.8	81	4600	1	--	--
19...	9.1	22.0	25	7.6	86	--	--	--	--
JUNE									
01...	7.9	20.5	25	6.8	75	7000	--	--	--
17...	8.1	28.0	20	10.3	130	2200	4	.01	.6
29...	8.5	29.0	20	--	--	--	--	--	--
JULY									
13...	8.1	27.0	25	10.2	126	--	--	--	--
21...	7.8	23.0	20	7.5	86	--	--	--	--
AUG.									
04...	8.3	22.0	10	13.7	156	2000	3	--	--
17...	8.3	25.0	20	10.2	121	--	--	--	--
31...	8.5	23.5	25	8.8	102	2800	0	--	--
SEP.									
14...	7.5	23.0	--	--	--	--	--	--	.6
14...	7.9	21.5	20	7.7	86	--	--	--	--

04184100 (revised) MAUMEE RIVER AT DEFIANCE, OHIO

LOCATION.--Lat 41°16'43", long 84°23'07", Defiance County, at waterworks on right bank at Defiance, about 300 ft upstream from Tiffin River, and 1.8 miles upstream from Auglaize River.

DRAINAGE AREA.--2,316 sq mi (revised).

PERIOD OF RECORD.--Chemical analyses: January 1966 to September 1971.
Water temperatures: January 1966 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,130 micromhos Feb. 4; minimum, 210 micromhos Feb. 8, 9.
Water temperatures: Maximum, 30.5°C June 28 to July 1; minimum, freezing point Dec. 25 to Jan. 18, Jan. 20, Feb. 1.

Period of record:
Specific conductance: Maximum, 1,350 micromhos Jan. 24, 1970; minimum, 210 micromhos Jan. 30, 1969, Feb. 8, 9, 1971.
Dissolved oxygen (1966-68, 1969-70): Maximum, 15.0 mg/l or greater on many days during 1966 to 1968; minimum, 0.2 mg/l Aug. 23, 1966.
Water temperatures: Maximum, 32.0°C July 3, 1966; minimum, freezing point on many days during 1966 to 1971.

REMARKS.--Continuous water-quality recorder operated since January 1966. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice a year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT.												
02...	0800	203	0	78	35	.7	10	356	230	64	587	7.5
12...	0810	262	0	110	49	.7	14	470	290	75	765	7.6
NOV.												
18...	0800	289	0	120	43	.8	12	510	350	110	791	7.5
30...	0745	158	0	83	30	.3	40	366	240	110	543	7.3
DEC.												
02...	0815	189	0	95	24	.4	35	396	260	100	563	7.4
16...	0815	242	0	120	52	.6	32	530	320	120	764	7.5
JAN.												
06...	0800	274	0	130	37	1.0	17	492	350	120	786	7.5
29...	0800	276	23	140	88	1.0	18	624	400	140	1050	8.6
FEB.												
03...	0755	322	24	160	81	1.1	15	688	450	140	1110	8.7
19...	0800	112	0	55	30	.3	14	254	160	68	428	8.0
MAR.												
01...	0815	103	0	43	15	.4	23	220	140	56	333	8.0
31...	0755	205	11	110	28	.4	24	414	300	110	638	8.5
APR.												
16...	1115	256	0	85	22	.0	6.9	384	310	100	614	7.6
26...	0845	258	0	120	46	.3	6.8	486	330	120	755	7.3
MAY												
05...	0750	265	0	110	36	.5	6.9	449	320	100	708	7.4
07...	0750	176	0	79	21	.3	31	326	240	96	494	7.2
JUNE												
02...	0745	148	0	64	22	.3	41	320	220	99	483	7.5
28...	0800	280	0	110	42	.5	8.1	466	330	100	762	7.6
JULY												
06...	0745	235	9	140	56	.6	8.8	508	330	120	798	8.5
19...	0755	159	0	70	26	.5	23	318	220	90	513	7.4
AUG.												
09...	0745	255	7	140	62	.7	4.9	510	340	120	840	8.4
29...	1515	265	0	91	36	.6	3.7	406	310	92	667	7.7
SEP.												
09...	1015	232	0	120	65	.8	9.1	492	280	90	798	7.3
27...	0800	180	6	94	43	.6	12	396	230	72	631	8.3

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.			
05...	10	10	.7
MAY			
21...	14	10	1.5

04184100 MAUMEE RIVER AT DEFIANCE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	620	530	---	---	---	---	780	750	1050	1010	340	310
2	540	530	---	---	---	---	770	770	1100	1050	370	340
3	580	540	---	---	---	---	780	770	1100	1080	400	370
4	640	570	---	---	---	---	800	740	1130	820	420	400
5	670	630	---	---	---	---	760	740	820	260	440	420
6	670	650	---	---	---	---	780	750	580	230	470	440
7	650	590	---	---	---	---	810	780	540	300	480	460
8	600	550	---	---	---	---	820	800	300	210	520	480
9	590	550	---	---	640	630	860	820	250	210	520	490
10	---	---	---	---	660	630	860	790	260	240	540	520
11	---	---	---	---	670	650	800	790	300	260	560	540
12	---	---	---	---	680	650	800	780	330	290	610	560
13	---	---	---	---	690	660	780	760	370	330	610	560
14	---	---	---	---	680	660	810	760	370	360	600	500
15	---	---	---	---	690	660	900	760	400	360	500	450
16	---	---	---	---	760	690	840	790	410	390	500	450
17	---	---	---	---	760	720	850	830	440	340	510	500
18	---	---	---	---	770	740	840	830	390	360	570	500
19	---	---	---	---	750	700	830	820	470	390	540	480
20	---	---	---	---	730	680	900	830	430	240	500	480
21	---	---	---	---	680	640	910	900	240	220	510	500
22	---	---	---	---	700	670	930	910	230	220	530	500
23	---	---	---	---	670	630	920	900	260	220	530	520
24	---	---	---	---	690	630	910	900	265	260	560	530
25	---	---	---	---	680	670	920	900	270	260	580	560
26	---	---	---	---	690	680	900	890	270	260	590	580
27	---	---	---	---	700	670	910	890	300	270	590	580
28	---	---	---	---	720	700	1020	910	310	300	600	590
29	---	---	---	---	730	710	1070	1020	---	---	620	600
30	---	---	---	---	750	730	1070	1050	---	---	650	610
31	---	---	---	---	770	750	1050	1010	---	---	640	630
MONTH	---	---	---	---	---	---	1070	740	1130	210	650	310

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	650	630	710	690	540	460	690	630	680	630	780	770
2	650	640	710	690	520	480	700	630	710	680	780	710
3	660	650	690	680	560	520	720	690	720	710	720	670
4	670	640	690	680	590	530	730	710	710	700	740	680
5	680	660	700	670	640	450	810	730	740	710	760	730
6	680	650	680	430	540	440	800	750	790	730	780	730
7	660	650	570	420	570	530	750	680	820	790	820	760
8	650	630	590	520	590	550	680	650	840	820	810	800
9	650	630	540	500	610	580	660	620	860	820	800	710
10	660	640	580	510	580	490	630	550	820	800	790	710
11	680	640	570	490	550	500	610	580	820	790	800	750
12	650	590	600	560	590	540	630	580	---	---	790	740
13	640	590	610	590	620	590	690	610	---	---	740	710
14	670	640	610	600	640	620	740	470	---	---	740	710
15	660	620	610	600	660	630	690	580	---	---	750	720
16	630	610	620	610	690	660	810	630	---	---	760	740
17	680	630	640	620	700	670	840	540	770	740	780	750
18	740	660	650	640	690	660	580	490	760	720	790	760
19	680	650	660	650	710	680	530	470	730	700	770	750
20	670	660	700	650	720	680	580	450	720	700	750	700
21	690	670	720	700	720	690	550	390	700	680	700	680
22	690	670	710	680	720	700	530	390	720	690	710	690
23	690	680	690	670	740	720	580	490	750	710	750	710
24	700	690	690	660	740	700	670	520	780	740	760	750
25	740	690	700	670	720	680	650	560	800	770	760	760
26	760	740	720	680	710	700	670	590	780	750	760	670
27	750	700	710	610	720	710	---	---	780	760	670	600
28	720	710	660	610	780	720	---	---	790	770	650	610
29	720	680	660	630	740	720	640	630	800	790	710	640
30	710	690	660	620	720	680	660	640	810	790	750	610
31	---	---	650	540	---	---	650	620	790	770	---	---
MONTH	760	590	720	420	780	440	840	390	860	630	820	600
YEAR	1130	210										

04184100 MAUMEE RIVER AT DEFIANCE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.9	5.5	9.5	8.3	---	---	---	---	---	---	11.8	11.8
2	8.3	6.3	9.9	8.6	---	---	---	---	---	---	11.9	11.8
3	8.8	7.3	9.4	8.3	---	---	---	---	---	---	---	---
4	9.7	8.0	9.6	8.6	---	---	---	---	---	---	---	---
5	10.1	8.5	10.0	9.0	---	---	---	---	---	---	11.8	11.5
6	12.0	8.9	---	---	---	---	---	---	---	---	11.5	11.1
7	12.4	10.0	---	---	---	---	---	---	---	---	11.4	11.1
8	13.1	9.3	---	---	---	---	---	---	---	---	11.5	11.0
9	12.0	10.1	---	---	11.2	10.6	---	---	---	---	11.9	11.4
10	10.8	8.9	---	---	10.6	10.5	---	---	---	---	11.8	11.5
11	10.9	9.1	---	---	10.5	10.2	---	---	---	---	11.5	11.5
12	12.2	8.5	---	---	10.4	10.2	---	---	---	---	11.5	11.0
13	9.8	7.9	---	---	10.8	10.4	---	---	---	---	11.4	11.1
14	9.4	7.3	---	---	10.8	10.6	---	---	---	---	11.3	11.1
15	10.1	7.6	---	---	11.1	10.8	---	---	---	---	11.6	10.6
16	8.3	5.8	---	---	10.9	10.5	---	---	---	---	10.7	10.5
17	7.4	5.9	---	---	10.8	10.5	---	---	---	---	11.1	10.6
18	8.6	7.3	---	---	11.2	10.4	---	---	10.5	9.9	11.2	11.0
19	8.4	8.0	---	---	11.1	10.8	---	---	10.7	9.8	11.2	9.4
20	8.4	8.0	---	---	---	---	---	---	11.1	10.7	10.3	9.8
21	8.4	7.7	---	---	---	---	---	---	11.0	10.7	10.2	10.1
22	8.9	7.8	---	---	---	---	---	---	11.1	10.8	10.2	10.1
23	9.6	8.1	---	---	---	---	---	---	11.2	11.0	10.6	10.1
24	9.7	8.5	---	---	---	---	---	---	11.5	11.1	10.6	10.4
25	9.7	8.5	---	---	---	---	---	---	11.8	11.5	10.5	10.2
26	9.4	8.3	---	---	---	---	---	---	11.8	11.6	10.2	10.1
27	10.3	8.5	---	---	---	---	---	---	11.8	11.6	10.2	9.9
28	9.8	8.2	---	---	---	---	---	---	12.0	11.6	9.9	9.6
29	8.2	6.8	---	---	---	---	---	---	---	---	9.8	9.6
30	9.4	6.9	---	---	---	---	---	---	---	---	10.1	9.8
31	9.2	7.9	---	---	---	---	---	---	---	---	10.1	9.8
MONTH	13.1	5.5	---	---	---	---	---	---	---	---	11.9	9.4

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.9	9.6	8.8	7.5	5.4	4.8	5.0	3.8	4.1	3.1	6.2	6.0
2	10.7	9.0	---	---	5.2	4.7	7.8	3.6	3.6	3.3	6.5	6.2
3	13.9	10.7	---	---	5.3	4.0	9.1	6.6	3.5	3.3	6.7	6.4
4	---	---	---	---	4.8	4.1	9.3	6.5	3.4	3.2	6.8	6.7
5	---	---	10.8	9.1	8.2	4.6	9.0	7.6	3.4	3.0	7.0	6.8
6	---	---	9.5	7.0	7.4	7.0	9.1	7.3	3.4	3.0	7.0	7.0
7	---	---	7.1	5.5	7.3	3.8	9.3	7.9	3.4	3.1	7.2	7.0
8	---	---	6.8	6.5	7.5	4.0	---	---	3.4	3.2	7.5	7.1
9	---	---	6.9	6.7	5.2	4.7	---	---	3.4	3.1	7.5	7.4
10	---	---	7.1	6.8	4.9	4.3	---	---	4.1	3.2	7.7	7.4
11	---	---	6.8	6.1	4.9	4.2	---	---	3.3	3.2	7.8	7.6
12	---	---	6.2	6.0	5.5	4.3	---	---	---	---	7.7	7.6
13	---	---	6.0	5.9	5.0	3.9	---	---	---	---	7.8	7.6
14	---	---	6.1	5.9	4.4	3.8	---	---	---	---	8.1	7.6
15	9.2	8.5	6.0	5.6	7.0	4.0	---	---	---	---	8.0	7.5
16	10.9	7.7	5.8	5.4	9.3	6.6	---	---	---	---	7.6	7.3
17	11.2	9.1	6.4	5.4	10.9	6.6	---	---	8.0	7.1	7.7	7.6
18	10.7	7.1	7.1	5.3	10.6	7.2	---	---	---	---	7.7	7.6
19	10.2	7.0	6.8	5.3	10.2	8.4	---	---	---	---	7.7	7.6
20	14.1	8.2	8.2	5.2	9.8	8.0	---	---	---	---	7.8	7.5
21	14.0	11.1	---	6.9	9.4	7.1	---	---	---	---	7.7	7.3
22	11.6	9.4	---	---	9.0	5.8	---	---	---	---	7.6	7.4
23	11.6	10.0	---	---	8.6	7.2	---	---	---	---	7.7	7.5
24	10.5	8.7	---	---	9.0	6.6	---	---	---	---	7.9	7.6
25	11.9	9.5	---	7.3	9.2	5.0	---	---	---	---	7.8	7.7
26	13.0	9.9	9.5	5.5	5.2	[illegible]	---	---	5.7	5.1	8.0	7.8
27	10.9	9.3	7.9	3.6	4.6	2.2	---	---	5.4	5.2	8.0	7.9
28	9.4	8.7	7.1	4.4	3.3	2.1	---	---	5.7	5.4	8.2	7.9
29	8.8	7.6	7.3	6.1	4.4	2.3	5.8	3.7	6.0	5.6	8.1	7.9
30	8.8	7.6	7.7	6.1	5.1	3.3	3.7	3.3	6.0	5.8	---	---
31	---	---	6.1	5.3	---	---	3.5	3.1	6.1	5.9	---	---
MONTH	---	---	---	3.6	10.9	2.1	---	---	---	---	8.2	6.0

04184100 MAUMEE RIVER AT DEFIANCE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	15.5	13.0	12.0	7.5	6.0	1.0	0.0	0.5	0.0	3.5	3.0
2	16.5	15.5	12.0	10.5	7.5	6.5	0.5	0.0	1.0	0.5	3.5	3.5
3	16.5	14.0	10.5	9.5	8.0	7.0	1.0	0.0	1.0	0.5	3.5	3.0
4	15.5	14.0	10.0	9.5	7.5	6.5	1.0	0.0	1.0	0.5	3.0	2.0
5	15.5	14.0	9.5	9.0	6.5	5.0	0.5	0.0	1.5	0.5	3.0	2.0
6	16.5	15.0	9.5	8.5	5.0	3.5	0.5	0.0	1.5	1.0	3.0	3.0
7	18.0	16.5	9.5	9.0	4.0	3.5	1.0	0.0	1.5	1.0	3.0	3.0
8	19.0	18.0	9.5	9.0	4.0	3.0	1.0	0.0	1.5	1.0	3.0	2.0
9	19.0	18.5	10.5	9.0	5.0	3.5	1.0	0.0	1.5	1.0	3.0	2.0
10	19.0	16.5	10.5	10.5	5.0	4.5	1.0	0.0	1.5	1.0	3.0	2.0
11	16.5	15.0	10.5	10.5	4.5	4.5	1.0	0.0	1.5	1.0	3.5	2.5
12	15.5	15.0	11.0	10.5	4.5	3.0	1.0	0.0	1.5	1.0	4.0	3.0
13	16.5	15.0	11.0	10.0	3.0	3.0	1.0	0.0	1.5	1.0	4.5	4.0
14	18.0	16.5	10.0	7.5	3.0	2.5	1.0	0.0	1.5	1.0	5.5	4.0
15	18.0	15.5	7.5	6.0	2.5	1.5	1.0	0.0	1.5	1.0	6.5	5.5
16	15.5	14.5	6.0	5.0	2.0	1.5	1.0	0.0	1.5	1.0	6.0	5.5
17	14.5	13.0	5.0	4.5	2.5	1.5	1.0	0.0	1.5	1.0	6.0	5.5
18	13.5	12.0	6.0	5.0	3.0	1.5	1.0	0.0	1.5	1.0	5.5	4.5
19	14.0	12.0	5.5	5.0	4.0	2.5	1.0	0.5	1.5	1.0	4.5	4.5
20	13.5	13.5	6.0	5.5	4.0	3.5	1.0	0.0	1.5	1.0	4.5	4.0
21	14.5	13.5	6.0	5.0	4.0	3.0	1.0	0.5	1.5	1.0	4.5	3.5
22	15.0	14.0	6.0	5.0	3.5	2.0	1.0	0.5	1.5	1.0	4.0	3.5
23	15.0	13.5	5.0	2.0	2.5	1.5	1.0	0.5	1.5	1.0	4.5	3.0
24	14.5	14.0	2.0	0.5	1.5	0.5	1.0	0.5	1.5	1.0	3.5	3.0
25	15.0	14.0	0.5	0.5	1.0	0.0	1.0	0.5	1.5	1.0	4.5	2.5
26	---	14.5	1.5	0.5	1.0	0.0	1.0	0.5	3.0	1.5	5.0	3.5
27	---	---	3.5	1.5	1.0	0.0	1.0	0.5	3.0	2.5	5.5	4.0
28	---	---	4.0	3.5	1.0	0.0	1.0	0.5	3.0	3.0	7.0	5.0
29	15.5	15.0	5.0	4.0	1.0	0.0	1.0	0.5	---	---	6.5	5.5
30	15.0	13.5	6.0	5.0	1.0	0.0	1.0	0.5	---	---	7.0	5.0
31	14.0	13.0	---	---	1.0	0.0	1.0	0.5	---	---	8.5	5.5
MONTH	19.0	12.0	13.0	0.5	8.0	0.0	1.0	0.0	3.0	0.0	8.5	2.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	7.5	14.0	12.5	19.0	18.0	30.5	28.0	23.5	21.0	24.0	23.0
2	8.0	7.0	14.0	13.0	19.5	18.0	29.5	27.0	24.0	22.0	23.5	22.0
3	7.5	6.0	14.5	12.0	19.5	17.5	28.0	24.0	24.0	23.5	23.5	22.0
4	7.5	5.5	14.0	12.5	21.5	19.5	27.0	25.0	23.5	22.0	24.0	23.0
5	7.0	6.0	14.0	13.0	22.5	21.5	25.5	23.5	23.0	21.5	26.0	23.5
6	7.0	5.5	13.5	12.0	23.5	22.0	26.5	24.0	25.0	21.5	26.0	24.5
7	8.5	5.5	13.0	12.0	24.0	22.5	27.5	25.5	24.5	22.5	24.5	23.5
8	10.0	7.0	13.5	12.0	24.0	22.0	28.0	26.5	25.5	23.0	26.0	24.0
9	11.5	9.0	14.0	13.0	22.0	21.0	28.5	27.5	25.5	24.0	26.0	25.0
10	12.0	9.5	14.5	13.0	22.0	21.0	28.0	26.0	26.5	25.0	26.0	24.5
11	13.0	10.0	15.0	13.5	22.0	21.0	26.5	25.0	25.5	25.0	25.5	24.5
12	15.0	11.5	15.5	14.5	24.0	21.5	26.5	24.0	---	---	24.5	23.0
13	14.5	12.5	15.5	14.5	25.0	23.5	28.0	25.5	---	---	23.0	21.5
14	13.5	11.0	17.0	15.0	25.5	24.0	27.5	25.5	---	---	23.0	21.0
15	14.5	12.0	18.5	16.0	26.0	24.0	26.5	24.5	---	---	23.5	22.0
16	14.5	12.5	19.5	17.0	26.0	24.0	26.0	23.5	---	---	23.0	21.0
17	16.0	14.0	20.5	18.0	27.0	24.0	26.5	24.5	24.5	23.0	21.5	20.0
18	16.5	14.0	22.0	19.0	27.0	25.0	26.5	24.0	25.0	22.0	21.0	20.0
19	16.0	14.0	21.5	20.0	28.0	25.5	26.5	25.0	25.0	23.5	21.0	20.0
20	16.0	14.0	21.0	19.5	29.0	26.5	25.0	23.5	26.5	24.0	20.0	19.0
21	15.5	13.5	20.5	18.5	28.0	27.0	26.0	24.5	27.0	24.5	19.0	18.0
22	14.5	13.0	20.5	18.5	27.5	25.5	27.0	25.5	28.0	25.5	19.0	17.5
23	16.0	13.5	20.5	18.5	27.0	25.5	27.0	26.0	27.5	26.0	19.0	18.0
24	15.5	13.5	20.0	19.0	27.5	26.5	28.0	26.5	26.5	24.5	19.0	17.0
25	15.0	12.5	20.0	17.0	28.0	27.0	28.5	26.5	25.5	24.0	18.0	16.0
26	15.5	13.5	17.0	15.0	28.0	27.0	28.5	26.0	25.0	23.5	16.5	16.0
27	15.0	12.5	15.5	14.5	30.0	27.5	---	---	25.0	23.0	19.0	16.5
28	12.5	11.5	16.5	15.0	30.5	28.5	---	---	23.0	22.0	20.5	18.0
29	11.5	10.5	18.0	15.5	30.5	29.0	24.5	23.0	23.5	22.0	21.0	20.0
30	13.5	10.5	19.0	16.5	30.5	29.5	24.0	21.5	24.5	21.5	21.0	20.0
31	---	---	19.5	17.5	---	---	21.5	20.5	24.5	22.5	---	---
MONTH	16.5	5.5	22.0	12.0	30.5	17.5	30.5	20.5	28.0	21.0	26.0	16.0
YEAR	30.5	0.0										

04184500 BEAN CREEK AT POWERS, OHIO

LOCATION.--Lat 41°40'39", long 84°13'56", in NE 1/4 sec.24, T.9 S., R.1 E., Fulton County, at gaging station on right bank at downstream side of bridge on U.S. Highway 20, 1 mile east of Powers, 2.2 miles upstream from Iron Creek, 3 miles downstream from Silver Creek, and 5.2 miles east of Fayette.

DRAINAGE AREA.--206 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1965-67, 1969 (partial-record station); October 1969 to September 1971.

REMARKS.--Samples collected monthly by the Lansing, Michigan district office as part of the Environmental Protection Agency national network.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	ALKA-LINITY AS CACO3 (MG/L)	CHLO-RIDE (CL) (MG/L)	NITRATE (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)
OCT.								
07...	1530	--	--	.2	--	--	.26	.21
NOV.								
09...	0940	--	--	.8	--	--	.24	.20
DEC.								
10...	1000	257	22	2.4	.12	.04	.45	.24
JAN.								
18...	1245	--	--	.9	--	--	.040	.040
FEB.								
24...	0845	--	--	1.5	--	--	.15	.040
MAR.								
22...	0930	185	14	1.8	.55	.00	.080	.080
APR.								
19...	1025	--	--	3.2	--	--	.10	.070
MAY								
24...	1145	--	--	.8	--	--	.24	.20
JUNE								
15...	0830	179	20	5.3	1.6	.05	.27	.030
JULY								
20...	1015	--	--	.4	--	--	.41	.070
AUG.								
13...	0920	--	--	.2	--	--	.070	.040

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL RESI-DUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (JTU)	PHENOLS (UG/L)
OCT.								
07...	--	--	--	--	696	8.1	13	0
NOV.								
09...	--	--	--	--	708	8.0	2	10
DEC.								
10...	426	28	454	350	678	7.8	5	13
JAN.								
18...	--	--	--	--	734	7.7	1	5
FEB.								
24...	--	--	--	--	346	7.1	10	17
MAR.								
22...	304	70	374	250	499	7.9	7	13
APR.								
19...	--	--	--	--	592	7.9	5	39
MAY								
24...	--	--	--	--	674	7.7	4	4
JUNE								
15...	340	246	586	270	519	7.4	120	15
JULY								
20...	--	--	--	--	643	8.0	10	3
AUG.								
13...	--	--	--	--	670	7.7	4	8

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04185300 TIFFIN RIVER AT EVANSPORT, OHIO

LOCATION.--Lat 41°25'38", long 84°23'22", Defiance County, on left bank at upstream side of bridge on State Highway 191, 0.4 mile east of center of Evansport, 1,300 ft downstream from Brush Creek, and 6.5 miles downstream from Beaver Creek.

DRAINAGE AREA.--541 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1968 to September 1971.
Water temperatures: June 1968 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,120 micromhos Oct. 11; minimum, 170 micromhos Feb. 23.
Water temperatures: Maximum, 29.0°C June 28, 29; minimum, freezing point Mar. 4, 7.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.							
05...	1645	--	--	--	--	--	--
DEC.							
09...	1130	293	0	95	29	.3	22
FEB.							
18...	1530	118	0	47	31	.3	25
26...	1200	102	0	38	18	.3	14
MAR.							
18...	1630	143	0	53	20	.2	23
29...	1700	238	0	78	25	.3	21
APR.							
05...	1945	240	0	80	32	.4	13
28...	1600	299	0	76	28	.4	3.8
MAY							
08...	0800	238	0	74	36	.3	17
21...	0945	--	--	--	--	--	--
30...	1530	289	0	82	38	.3	17
JUNE							
05...	0700	250	0	88	43	.3	63
14...	1830	164	0	54	21	.3	39
JULY							
10...	1800	326	0	71	55	.4	4.5
21...	0830	164	0	59	32	.3	46
29...	1730	--	--	--	--	--	--
AUG.							
04...	1335	270	14	68	41	.4	5.2
29...	1745	278	14	74	68	.5	3.8
SEP.							
20...	1635	272	6	71	64	.5	3.5
29...	1500	244	8	66	54	.5	5.7

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	690	660	710	690	440	420	710	690	---	---	345	309
2	660	660	710	700	450	420	720	680	---	---	363	327
3	680	660	730	700	510	440	700	690	---	---	420	360
4	680	670	740	700	580	500	690	650	---	---	444	375
5	690	680	710	690	590	570	700	630	---	---	480	384
6	690	670	740	710	600	590	630	600	---	---	531	459
7	680	670	740	720	600	590	670	620	---	---	546	492
8	690	680	730	730	640	600	650	630	---	---	522	447
9	700	680	730	720	650	630	690	640	---	---	471	423
10	780	660	740	710	650	630	720	650	---	---	516	459
11	1120	490	800	660	650	640	740	710	---	---	549	516
12	660	570	690	660	660	650	750	730	---	---	---	---
13	680	650	690	680	660	620	750	740	---	---	672	537
14	660	590	690	680	620	590	750	730	---	---	552	426
15	610	540	700	690	590	570	730	710	---	---	426	372
16	590	560	730	700	620	596	720	710	---	---	423	381
17	600	550	740	730	650	620	710	700	---	---	426	405
18	620	550	730	710	650	640	710	700	410	330	432	408
19	660	620	720	710	640	570	710	700	340	220	477	429
20	680	660	720	680	570	460	740	710	220	180	528	477
21	700	680	710	570	530	460	730	720	210	190	546	528
22	710	700	620	580	510	460	740	730	200	180	555	408
23	720	700	580	570	570	510	750	740	180	170	588	555
24	730	700	620	580	610	570	750	730	220	180	603	582
25	720	700	660	620	630	600	740	730	280	220	612	594
26	700	700	680	660	670	630	---	---	320	280	636	603
27	700	700	700	680	680	650	---	---	330	309	654	630
28	700	700	700	580	680	650	---	---	330	321	669	648
29	710	700	580	460	690	670	---	---	---	---	666	657
30	820	680	480	420	690	670	---	---	---	---	672	660
31	690	660	---	---	710	680	---	---	---	---	675	660
MONTH	1120	490	800	420	710	420	750	600	---	---	675	309

04185300 TIFFIN RIVER AT EVANSPORT, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1970-71): Maximum, 1,120 micromhos Oct. 11, 1970; minimum, 170 micromhos Feb. 23, 1971.
Water temperatures (1970-71): Maximum, 29.0°C June 28, 29, 1971; minimum, freezing point Mar. 4, 7, 1971.

REMARKS.--Continuous water-quality recorder operated since June 1968. Interruptions in the record were due to malfunctions of the instrument. Tabular data omitted for those periods when no data were recorded. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected three times during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.						
05...	--	--	--	--	8.0	1.3
DEC.						
09...	460	350	110	706	--	--
FEB.						
10...	236	160	64	424	--	--
26...	174	130	46	316	--	--
MAR.						
10...	250	190	73	420	--	--
29...	360	290	94	603	--	--
APR.						
05...	382	310	110	649	--	--
28...	410	320	74	669	--	--
MAY						
08...	394	300	100	654	--	--
21...	--	--	--	--	109	6.5
30...	450	350	110	733	--	--
JUNE						
05...	494	380	170	760	--	--
14...	296	230	96	470	--	--
JULY						
10...	436	340	72	755	--	--
21...	306	220	86	514	--	--
29...	--	--	--	--	--	1.5
AUG.						
04...	402	300	55	677	--	--
29...	444	310	58	772	--	--
SEP.						
20...	426	290	56	730	--	--
29...	396	270	56	669	--	--

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	678	575	600	492	747	705	726	717	---	---	744	738
2	699	657	696	486	738	714	735	726	---	---	753	720
3	699	687	696	675	861	762	738	729	---	---	720	655
4	702	675	693	648	828	798	747	714	---	---	714	672
5	675	666	702	657	807	777	729	693	---	---	720	690
6	675	666	696	605	783	777	693	645	720	714	729	720
7	681	669	711	654	780	753	723	663	720	708	726	642
8	687	681	777	669	753	516	729	702	726	696	735	655
9	696	678	798	711	669	633	741	729	729	708	738	655
10	687	678	723	663	672	636	768	738	735	717	708	699
11	684	648	660	615	702	672	744	708	723	684	711	702
12	669	651	618	564	729	696	891	687	705	693	702	675
13	672	660	693	528	739	636	795	651	720	678	687	681
14	684	666	708	681	732	420	663	648	723	618	684	675
15	696	672	693	678	528	411	678	663	726	708	693	672
16	699	657	693	678	564	510	678	666	714	705	723	653
17	690	660	693	672	609	564	693	678	723	690	732	723
18	696	687	702	687	639	609	690	672	726	669	741	728
19	693	672	708	659	660	635	672	666	714	702	777	741
20	693	666	717	708	675	636	---	---	711	702	783	723
21	694	648	726	708	690	642	---	---	717	702	768	699
22	684	666	735	723	699	690	---	---	738	717	777	753
23	690	672	738	714	708	695	---	---	738	738	777	687
24	711	678	732	711	714	700	---	---	---	---	711	690
25	702	669	735	690	714	669	---	---	---	---	717	656
26	709	642	777	723	711	660	---	---	---	---	696	678
27	687	576	819	759	714	672	---	---	---	---	702	653
28	639	516	813	744	723	657	---	---	---	---	696	653
29	633	555	750	690	726	665	---	---	---	---	693	675
30	642	519	753	678	720	714	---	---	---	---	732	690
31	---	---	747	732	---	---	---	---	---	---	---	---
MONTH	711	516	819	486	861	411	---	---	---	---	783	642
YEAR	1120	170										

04185300 TIFFIN RIVER AT EVANSPORT, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.7	8.3	8.1	7.9	7.8	7.8	7.8	---	---	7.5	7.4
2	8.0	7.9	8.3	8.2	7.9	7.8	7.9	7.6	---	---	7.5	7.4
3	8.0	7.9	8.2	8.2	7.8	7.5	7.9	7.8	---	---	7.5	7.3
4	8.1	7.9	8.3	8.2	7.6	7.4	7.9	7.8	---	---	7.3	7.3
5	8.0	7.9	8.2	8.1	7.7	7.6	7.9	7.8	---	---	7.3	7.3
6	8.1	7.8	8.2	7.9	7.8	7.7	7.8	7.7	7.9	7.8	7.3	7.2
7	8.0	7.5	8.1	7.8	7.8	7.8	7.8	7.6	7.9	7.9	7.2	7.1
8	8.0	7.3	8.4	7.9	7.9	7.6	7.9	7.6	7.9	7.8	7.2	7.2
9	8.0	7.7	8.1	7.9	7.8	7.7	7.9	7.9	7.9	7.8	7.2	7.2
10	8.0	7.5	8.2	8.0	7.9	7.8	7.9	7.8	7.9	7.8	7.3	7.2
11	8.0	7.6	8.2	8.1	7.8	7.7	7.9	7.9	7.9	7.8	7.2	7.1
12	8.7	7.6	8.2	8.1	7.8	7.7	7.9	7.7	7.8	7.6	7.2	7.1
13	8.0	7.8	8.2	8.1	7.9	7.6	7.8	7.6	7.7	7.5	7.2	7.2
14	8.0	7.8	8.2	8.1	7.9	7.5	7.8	7.8	7.8	7.5	7.2	7.2
15	8.0	7.7	8.2	8.1	7.6	7.4	7.8	7.8	7.8	7.7	7.3	7.2
16	8.1	7.5	8.3	8.2	7.6	7.5	7.8	7.8	7.8	7.7	7.3	7.3
17	8.0	7.8	8.2	8.1	7.6	7.5	7.9	7.8	7.8	7.7	7.4	7.3
18	8.1	7.9	8.2	8.1	7.7	7.5	7.9	7.8	7.8	7.6	7.5	7.4
19	8.1	7.9	8.2	8.0	7.7	7.5	7.9	7.8	7.7	7.6	7.6	7.5
20	8.6	7.8	8.1	8.0	7.7	7.2	---	---	7.8	7.6	7.6	7.5
21	8.2	8.0	8.1	8.0	7.7	7.6	---	---	7.8	7.7	7.6	7.5
22	8.1	8.0	8.1	7.9	7.8	7.6	---	---	7.7	7.6	7.5	7.4
23	8.1	8.0	8.0	7.9	7.8	7.6	---	---	7.7	7.7	7.7	7.5
24	8.1	8.1	8.0	7.9	7.9	7.6	---	---	---	---	7.8	7.7
25	8.1	8.0	7.9	7.8	7.9	7.7	---	---	---	---	7.8	7.7
26	8.1	8.1	7.9	7.7	7.9	7.5	---	---	---	---	7.8	7.8
27	8.2	8.1	7.9	7.8	7.9	7.3	---	---	---	---	7.8	7.7
28	8.2	8.2	7.9	7.8	7.9	7.6	---	---	---	---	7.9	7.8
29	8.2	8.2	7.9	7.8	7.8	7.7	---	---	---	---	7.9	7.8
30	8.2	8.1	8.0	7.7	7.8	7.8	---	---	---	---	7.9	7.8
31	---	---	7.9	7.7	---	---	---	---	---	---	---	---
MONTH	8.7	7.3	8.4	7.7	7.9	7.2	---	---	---	---	7.9	7.1

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.6	8.4	8.0	5.0	4.6	3.2	2.6	---	---	6.1	5.5
2	9.8	9.6	8.1	7.8	5.0	4.7	3.6	2.5	---	---	6.1	5.7
3	10.5	9.7	8.2	7.9	5.8	4.7	4.1	3.3	---	---	5.9	5.0
4	11.0	10.5	8.3	8.1	5.5	5.3	4.2	3.5	---	---	5.8	5.1
5	11.3	7.7	8.1	7.5	5.3	5.0	4.1	3.1	---	---	5.5	5.1
6	11.3	11.0	7.8	7.2	5.0	4.4	3.5	3.0	4.8	4.2	5.4	5.0
7	11.0	10.6	7.6	7.0	4.6	4.2	3.5	3.1	4.7	3.4	5.1	4.9
8	10.6	10.1	7.8	6.9	4.7	4.4	3.3	3.1	3.6	2.3	5.7	4.6
9	10.1	9.7	8.0	7.2	4.5	4.7	3.2	2.5	3.2	2.3	5.5	4.8
10	9.7	9.5	8.3	7.6	4.9	4.8	3.1	2.3	2.9	2.4	5.5	5.0
11	9.7	9.2	7.9	7.2	4.8	4.7	3.3	2.7	2.9	2.5	5.1	4.7
12	9.9	8.9	8.0	6.8	4.8	4.5	3.2	2.7	3.0	2.7	5.4	4.9
13	8.9	8.4	8.1	7.1	4.7	4.3	2.8	2.3	3.0	2.8	5.9	5.3
14	8.7	8.4	8.3	7.4	4.5	4.4	2.9	2.5	3.9	2.7	5.9	5.7
15	8.7	8.4	8.7	7.5	4.9	4.6	2.9	2.4	3.9	3.3	6.2	5.4
16	8.9	8.6	8.3	7.2	4.5	4.3	3.4	2.6	4.4	3.7	6.5	6.0
17	8.6	8.2	8.0	6.7	4.3	4.1	3.6	3.2	4.3	3.8	6.9	6.4
18	8.3	7.9	7.5	6.0	4.1	3.5	3.5	3.2	4.6	3.9	7.3	6.7
19	8.0	7.8	6.6	5.2	3.5	3.6	3.5	3.2	4.3	3.7	7.0	6.8
20	9.0	7.6	5.6	4.7	3.6	3.3	---	---	4.5	3.7	7.1	6.7
21	7.6	6.1	6.3	4.7	3.5	3.1	---	---	4.0	3.1	7.0	6.2
22	8.1	7.6	6.2	5.3	3.8	3.4	---	---	3.5	3.1	6.7	4.9
23	8.4	7.7	6.6	5.4	3.9	3.4	---	---	3.4	3.1	7.1	5.5
24	8.1	7.4	6.5	4.9	4.1	3.6	---	---	---	---	7.4	6.8
25	8.6	7.7	4.9	4.4	4.2	3.4	---	---	---	---	7.4	7.1
26	8.0	7.5	5.9	4.5	3.9	3.3	---	---	---	---	7.5	7.3
27	7.9	7.6	6.1	5.5	3.8	3.1	---	---	---	---	7.3	6.7
28	7.9	7.6	6.4	6.1	3.6	2.8	---	---	---	---	6.7	6.4
29	8.5	7.8	6.4	6.0	3.2	2.7	---	---	---	---	6.4	5.7
30	8.5	8.4	6.1	5.6	3.4	2.7	---	---	---	---	5.8	5.3
31	---	---	5.6	5.0	---	---	---	---	---	---	---	---
MONTH	11.3	6.1	8.7	4.4	5.8	2.7	---	---	---	---	7.5	4.6

04185300 TIFFIN RIVER AT EVANSPORT, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	13.0	13.0	11.5	8.0	6.5	1.5	1.0	---	---	4.5	3.0
2	15.0	13.5	12.0	11.0	9.5	7.0	2.0	1.5	---	---	4.0	3.0
3	15.0	13.5	11.0	10.5	8.5	7.5	2.0	1.5	---	---	3.5	1.5
4	13.5	12.0	10.5	10.5	8.5	7.0	2.0	1.5	---	---	3.5	0.0
5	13.5	12.0	10.5	9.5	7.0	6.0	1.5	1.5	---	---	2.0	---
6	15.0	13.0	9.5	9.0	6.0	4.5	1.5	1.5	---	---	2.5	2.0
7	16.0	14.5	10.0	9.0	4.5	3.0	1.5	1.5	---	---	2.5	0.0
8	17.0	15.5	10.0	9.0	3.5	3.0	1.5	1.0	---	---	2.5	1.5
9	18.0	16.5	10.0	9.0	4.5	3.0	1.5	1.0	---	---	3.0	1.0
10	18.0	15.5	10.5	10.0	5.0	3.5	1.5	1.5	---	---	2.5	1.5
11	15.5	14.0	11.0	10.5	5.5	4.5	2.0	1.5	---	---	---	---
12	14.5	14.0	11.0	10.5	5.5	4.0	2.5	1.5	---	---	---	---
13	15.5	14.5	11.0	10.5	4.5	4.0	2.0	1.5	---	---	4.5	3.5
14	16.5	15.5	11.0	9.0	4.0	3.0	2.0	1.5	---	---	6.5	3.5
15	16.5	14.5	9.0	8.0	3.0	1.5	2.0	1.5	---	---	7.5	6.5
16	14.5	13.0	8.0	6.5	3.0	1.5	1.5	1.0	---	---	6.5	5.0
17	13.5	12.0	6.5	6.0	2.0	1.5	2.0	1.5	---	---	5.0	3.5
18	12.0	11.0	6.0	5.5	2.5	1.5	1.5	1.0	1.5	1.0	4.5	3.5
19	12.0	10.5	6.5	5.5	3.5	2.5	1.5	1.0	2.5	1.5	3.5	3.0
20	12.0	11.0	7.0	6.0	3.5	3.0	1.5	1.5	2.0	1.5	3.5	3.0
21	12.0	11.5	7.0	6.5	3.5	3.0	2.0	1.5	2.5	1.5	5.0	2.5
22	13.0	11.5	8.0	6.5	3.5	2.0	1.5	1.0	2.0	1.5	5.5	4.0
23	13.5	12.0	6.5	4.0	3.5	2.5	2.0	1.5	2.0	1.5	4.5	4.0
24	13.5	12.0	4.0	3.0	3.0	1.5	2.0	1.0	2.0	1.5	4.5	3.0
25	14.0	13.0	3.0	1.5	2.5	1.5	2.0	1.5	2.0	1.0	4.5	2.5
26	14.0	13.0	2.5	1.5	5.5	1.0	---	---	3.5	1.0	5.5	2.5
27	14.5	13.5	4.0	2.5	4.5	1.5	---	---	3.5	2.0	5.5	3.5
28	14.5	14.0	5.0	3.5	13.0	1.0	---	---	4.0	1.5	7.5	5.0
29	14.5	14.0	6.5	4.5	2.0	1.0	---	---	---	---	7.0	6.0
30	14.0	12.5	7.0	6.5	3.0	1.0	---	---	---	---	8.5	5.5
31	13.5	12.0	---	---	2.0	1.0	---	---	---	---	9.0	6.0
MONTH	19.0	10.5	13.0	1.5	13.0	1.0	2.5	1.0	---	---	9.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	6.0	12.5	10.5	18.5	17.5	29.0	26.0	---	---	---	---
2	8.0	7.0	11.5	10.0	19.5	17.0	26.0	23.5	---	---	---	---
3	7.5	6.0	12.5	9.5	20.0	17.5	25.5	22.5	---	---	---	---
4	7.0	5.0	12.5	10.5	21.5	18.5	26.0	22.5	---	---	---	---
5	6.0	4.5	12.5	11.0	23.0	20.5	24.0	23.5	---	---	---	---
6	7.0	4.5	13.5	12.0	24.0	22.0	26.0	22.5	22.0	19.5	---	---
7	9.0	5.5	13.0	12.0	24.5	22.5	27.0	23.0	23.5	19.0	23.5	22.5
8	10.5	7.0	16.0	12.5	23.5	20.0	26.0	24.0	24.5	20.0	24.5	21.0
9	11.5	9.5	17.0	13.5	20.5	19.0	26.5	24.5	24.5	21.0	24.5	22.0
10	13.0	9.5	18.0	14.0	20.5	18.5	25.5	24.5	27.0	22.5	24.0	21.0
11	14.0	10.5	17.0	16.0	20.5	19.0	25.5	22.5	25.5	23.5	22.5	21.0
12	16.0	12.5	16.5	15.5	21.5	19.5	25.5	22.0	24.0	20.5	20.5	19.0
13	15.0	12.5	16.5	14.0	23.0	21.0	25.5	23.0	25.0	20.5	20.0	18.0
14	14.0	11.0	17.5	14.5	23.0	21.0	25.5	22.5	26.5	21.5	20.5	16.5
15	14.5	11.5	18.5	15.0	23.0	21.0	25.0	21.5	26.0	23.0	22.0	18.5
16	13.5	10.5	20.0	17.0	23.5	20.5	24.0	20.5	25.0	21.5	19.0	17.5
17	14.5	12.5	20.5	17.0	23.5	21.0	24.5	22.0	---	---	20.0	17.0
18	15.0	13.0	22.0	19.0	24.0	21.0	25.0	21.0	---	---	18.5	16.0
19	15.5	12.5	22.0	20.5	24.5	22.0	25.0	23.5	---	---	18.0	16.0
20	16.5	12.0	20.5	18.5	25.5	23.0	---	---	---	---	17.5	16.0
21	15.0	13.0	19.5	17.5	24.5	23.0	---	---	---	---	17.5	13.5
22	14.5	11.5	19.0	16.5	24.5	22.0	---	---	---	---	16.0	12.5
23	14.5	11.5	19.0	16.0	24.0	20.5	---	---	---	---	15.5	14.0
24	13.5	11.5	19.0	17.5	25.0	22.5	---	---	---	---	15.0	12.0
25	13.5	10.5	18.0	15.0	26.0	23.5	---	---	---	---	13.0	11.0
26	13.0	11.5	15.0	13.5	26.0	24.0	---	---	---	---	13.0	11.0
27	12.5	10.0	14.5	12.5	27.5	24.0	---	---	---	---	17.0	12.0
28	10.5	9.5	15.0	12.5	29.0	25.5	---	---	---	---	20.0	16.0
29	10.0	9.0	16.5	13.5	29.0	26.0	---	---	---	---	21.5	19.5
30	12.5	9.0	18.0	14.5	28.5	26.0	---	---	---	---	22.5	19.0
31	---	---	19.5	16.5	---	---	---	---	---	---	---	---
MONTH	16.5	4.5	22.0	9.5	29.0	17.0	---	---	---	---	24.5	11.0
YEAR	29.0	0.0										

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO

LOCATION.--Lat 40°56'55", long 84°15'58", in SE 1/4 sec.15, T.1 S., R.5 E., Putnam County, at gaging station on left bank 200 ft upstream from bridge on U.S. Highway 224, 3.5 miles northeast of Fort Jennings, 6 miles upstream from Ottawa River, and 7.3 miles downstream from Jennings Creek.

DRAINAGE AREA.--332 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1971.
Water temperatures: October 1968 to September 1971.
Sediment records: Water years 1970-71 (partial-record station).

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,330 micromhos Feb. 2-4; minimum, 150 micromhos Feb. 20.
pH: Maximum, 9.4 Aug. 7, 8; minimum, 7.0 Sept. 22-24.
Dissolved oxygen: Maximum, 15.0 mg/l on several days during December to February, April and July; minimum, 2.0 mg/l Aug. 5-7.
Water temperatures: Maximum, 29.0°C June 20; minimum, freezing point on several days during November to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.							
05...	1300	--	--	--	--	--	--
13...	0930	21	241	0	150	78	.7
29...	1205	15	276	0	180	85	.9
NOV.							
02...	1215	16	250	16	180	87	.9
24...	0840	15	259	15	180	93	1.1
DEC.							
08...	1345	19	266	17	180	83	1.0
14...	1040	111	239	0	140	55	.6
JAN.							
06...	1300	131	213	11	140	48	.9
29...	1220	20	252	22	190	120	.7
FEB.							
01...	0100	17	393	0	240	100	1.1
21...	1050	2500	56	0	33	15	.3
MAR.							
01...	1050	391	147	0	72	24	.3
31...	1410	53	238	0	130	41	.4
APR.							
15...	0850	49	250	0	130	30	.5
20...	1040	37	207	0	130	49	.5
MAY							
04...	1430	41	301	0	140	51	.2
09...	0940	1570	122	0	65	23	.3
20...	1500	--	--	--	--	--	--
JUNE							
21...	1445	42	226	0	120	49	.5
26...	2630	1180	146	0	65	21	.4
JULY							
07...	1515	41	206	0	110	38	.5
12...	2120	590	105	0	40	12	.2
AUG.							
02...	0900	47	236	0	92	33	.4
29...	0915	22	296	0	150	62	.4
SEP.							
14...	1430	24	234	0	110	56	.5
22...	0945	241	160	0	76	36	.4

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-71): Maximum, 1,330 micromhos Feb. 2-4, 1971; minimum, 150 micromhos Feb. 20, 1971.
pH (1969-71): Maximum, 9.8 July 22, 1970; minimum, 6.6 Feb. 4, 1970.
Dissolved oxygen (1969-71): Maximum, 15.0 mg/l on several days during 1969, 1970, and 1971; minimum, 2.0 mg/l Aug. 5-7, 1971.
Water temperatures (1969-71): Maximum, 30.0°C July 1, Aug. 1, 1970; minimum, freezing point on several days during 1969, 1970, and 1971.

REMARKS.--Continuous water-quality recorder operated since October 1968. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitation. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. Sediment data for this station on page 399.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
05...	--	--	--	--	--	21	[illegible]
13...	3.3	552	320	120	869	--	--
29...	5.7	634	380	150	975	--	--
NOV.							
02...	4.3	628	370	140	975	--	--
24...	6.4	672	400	160	1050	--	--
DEC.							
08...	12	662	410	160	1040	--	--
14...	34	540	350	150	827	--	--
JAN.							
06...	17	508	340	150	761	--	--
29...	12	762	460	190	1180	--	--
FEB.							
01...	10	814	530	210	1280	--	--
21...	16	148	91	44	248	--	--
MAR.							
01...	39	344	230	110	517	--	--
31...	26	494	340	140	750	--	--
APR.							
15...	7.3	474	350	140	804	--	--
20...	3.7	482	350	130	784	--	--
MAY							
04...	4.2	586	390	140	889	--	--
09...	62	372	230	120	502	--	--
20...	--	--	--	--	--	14	1.4
JUNE							
21...	10	490	320	130	740	--	--
26...	30	312	210	90	466	--	--
JULY							
07...	19	464	350	130	738	--	--
12...	16	204	140	52	317	--	--
AUG.							
02...	9.2	406	290	96	637	--	--
29...	2.7	602	380	140	941	--	--
SEP.							
14...	7.5	460	300	110	742	--	--
22...	17	336	220	89	550	--	--

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	843	786	955	932	856	805	966	941	1280	1190	518	480
2	908	843	964	929	913	852	963	932	1330	1270	550	513
3	955	904	949	926	931	894	950	914	1330	1320	574	550
4	972	953	988	927	948	900	914	816	1330	874	654	574
5	983	958	991	942	974	938	816	750	880	412	698	648
6	982	949	954	916	1010	956	831	746	466	390	702	673
7	971	944	974	942	1030	985	858	833	475	300	682	661
8	967	934	972	951	1050	1020	882	858	384	351	727	655
9	958	915	965	945	1060	1030	874	847	450	384	706	682
10	915	882	965	920	1040	1030	849	804	527	450	719	692
11	903	884	967	916	1020	987	820	750	577	527	717	674
12	893	870	964	923	987	808	849	817	591	573	690	669
13	884	804	958	925	829	788	878	849	689	590	669	556
14	884	830	982	927	844	798	880	867	705	618	562	523
15	902	880	996	883	950	834	874	860	699	609	547	480
16	934	859	1020	897	970	945	907	874	657	635	557	523
17	940	929	1050	930	969	945	942	889	664	257	564	545
18	943	922	1060	927	961	934	943	924	529	414	613	581
19	998	938	1050	1000	936	909	939	927	287	219	643	613
20	994	945	1010	883	910	856	948	928	221	150	654	637
21	998	962	1030	920	860	852	960	945	257	210	672	654
22	1030	958	1020	922	870	855	---	---	313	256	704	672
23	1000	866	1010	906	869	840	---	---	275	246	705	685
24	966	930	1050	957	860	840	---	---	291	248	714	693
25	955	929	1090	980	896	847	---	---	414	257	712	696
26	993	954	1150	1090	915	882	---	---	456	414	742	698
27	1010	924	1130	1110	923	894	---	---	455	446	740	706
28	959	872	1120	1040	896	843	---	---	480	453	732	716
29	979	933	1060	929	878	843	1180	1170	---	---	730	703
30	963	927	944	832	936	874	1170	1110	---	---	730	706
31	963	936	---	---	950	927	1190	1120	---	---	750	689
MONTH	1030	786	1150	832	1060	788	---	---	1330	150	750	480

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	759	735	975	885	723	658	601	580	633	612	842	807
2	752	723	997	884	708	648	601	515	644	632	835	783
3	748	714	993	879	691	371	611	572	679	641	824	795
4	763	730	975	873	432	378	682	611	720	679	801	711
5	734	726	890	866	533	416	731	682	765	720	750	705
6	765	727	867	637	598	533	767	723	746	714	730	628
7	827	748	784	596	639	592	784	704	754	713	628	513
8	859	827	609	570	663	637	710	646	738	700	579	519
9	856	841	570	527	682	657	674	625	725	680	593	548
10	842	801	622	561	698	682	661	589	717	692	614	589
11	802	782	657	622	713	676	610	487	735	712	641	596
12	811	788	669	654	742	710	578	312	768	727	685	639
13	816	794	720	660	762	693	567	333	748	727	730	669
14	821	783	711	672	749	704	465	378	802	748	773	703
15	811	773	702	687	749	716	441	391	816	801	789	765
16	839	809	700	684	787	730	491	441	812	793	804	779
17	878	804	704	682	772	672	519	491	823	787	829	798
18	822	773	702	682	743	669	560	520	830	788	824	799
19	802	735	717	687	726	670	592	560	809	766	820	790
20	798	744	711	697	736	675	630	588	941	789	809	767
21	811	777	705	657	764	685	645	627	922	627	797	638
22	842	772	696	655	709	693	644	578	837	814	638	543
23	848	750	726	688	709	694	607	529	851	834	572	554
24	850	790	831	726	734	696	554	537	860	819	629	571
25	870	777	738	417	720	660	643	543	849	825	674	629
26	860	812	430	407	682	438	639	473	856	835	691	663
27	897	846	502	407	439	383	617	482	879	851	699	613
28	937	836	587	502	457	421	642	575	888	853	637	534
29	917	809	616	587	527	466	638	615	876	811	558	528
30	898	836	646	616	581	525	616	592	858	816	603	558
31	---	---	660	643	---	---	614	593	833	750	---	---
MONTH	937	714	997	407	787	371	784	312	941	612	842	513
YEAR	1330	150										

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.1	7.9	8.1	7.9	7.9	7.8	8.8	8.7	8.2	8.1	7.9	7.8
2	8.2	7.9	8.0	7.9	7.9	7.8	8.9	8.7	8.2	8.1	7.9	7.5
3	8.4	8.0	8.1	7.9	7.9	7.9	8.9	8.1	8.2	8.2	7.9	7.8
4	8.4	8.2	8.1	7.9	8.2	7.9	8.6	8.2	8.2	8.1	8.3	7.9
5	8.6	8.2	8.1	7.5	8.4	8.1	8.5	8.3	8.1	7.8	8.4	8.2
6	8.6	8.3	8.1	8.0	8.6	8.4	8.5	8.1	7.9	7.8	8.4	8.2
7	8.7	8.3	8.1	7.9	8.7	8.5	8.2	8.1	7.9	7.7	8.3	8.2
8	8.8	8.5	8.1	7.9	8.9	8.3	8.2	8.1	7.7	7.7	8.4	8.1
9	8.7	8.5	8.1	7.9	8.9	8.8	8.2	8.1	7.7	7.7	8.6	8.2
10	8.5	8.1	8.0	7.9	8.9	8.8	8.2	8.1	7.7	7.7	8.2	8.1
11	8.4	7.5	7.9	7.8	8.9	8.7	8.2	8.1	7.8	7.7	8.2	7.5
12	8.2	8.0	7.8	7.6	8.7	8.5	8.3	8.1	7.8	7.7	8.3	8.0
13	8.0	7.7	7.8	7.7	8.5	8.4	8.2	8.1	7.8	7.7	8.1	7.8
14	7.8	7.6	7.9	7.7	8.7	8.5	8.2	8.1	7.7	7.7	8.1	7.9
15	7.9	7.7	8.1	7.9	8.8	8.7	8.3	8.1	7.7	7.7	7.9	7.7
16	8.1	7.8	8.1	7.5	8.7	8.7	8.3	8.1	7.8	7.7	7.8	7.7
17	8.3	7.9	8.1	8.0	8.8	8.7	8.3	8.2	7.7	7.5	8.0	7.8
18	8.3	8.1	8.2	7.5	8.8	8.7	8.3	8.2	7.5	7.4	8.0	7.9
19	8.5	8.1	8.1	8.0	8.7	8.6	8.2	8.1	7.7	7.5	7.9	7.9
20	8.4	8.3	8.1	8.0	8.7	8.6	8.3	8.2	7.8	7.6	7.9	7.8
21	8.5	8.1	8.2	8.1	8.7	7.4	8.2	8.1	8.0	7.8	8.1	7.9
22	8.6	8.2	8.2	7.5	8.5	7.5	---	---	8.0	7.9	8.0	7.9
23	8.6	8.3	8.3	8.1	8.5	8.4	---	---	8.1	7.5	8.1	7.8
24	8.6	8.3	8.3	8.2	8.6	8.4	---	---	8.2	8.1	8.2	8.0
25	8.5	8.1	8.3	8.2	8.7	8.5	---	---	8.3	8.1	8.2	8.1
26	8.4	8.1	8.3	8.3	8.6	8.5	---	---	8.1	7.5	8.2	8.1
27	8.4	8.1	8.4	8.2	8.6	8.5	---	---	7.9	7.8	8.2	8.1
28	8.3	8.1	8.3	8.1	8.6	8.2	---	---	7.9	7.8	8.2	8.1
29	8.1	7.8	8.2	7.9	8.7	8.5	8.3	8.2	---	---	8.3	8.0
30	8.2	7.7	8.0	7.9	8.7	8.6	8.3	8.2	---	---	8.3	8.2
31	8.2	7.9	---	---	8.8	8.7	8.3	8.1	---	---	8.5	8.2
MONTH	8.8	7.5	8.4	7.5	8.9	7.4	---	---	8.3	7.4	8.6	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.3	8.8	8.5	7.9	7.8	7.8	7.7	8.0	7.8	8.2	8.0
2	8.4	8.2	8.7	8.4	7.9	7.6	7.8	7.7	8.1	7.8	8.1	7.9
3	8.4	8.2	8.8	8.4	7.7	7.4	7.9	7.6	8.4	7.9	8.0	7.8
4	8.5	8.3	8.6	8.2	7.5	7.3	8.1	7.7	8.6	8.0	7.8	7.6
5	8.5	8.4	8.3	8.1	7.7	7.5	8.0	7.8	9.0	8.2	7.9	7.6
6	8.6	8.4	8.2	7.6	7.8	7.6	8.4	7.5	9.1	8.6	7.7	7.5
7	8.7	8.4	7.7	7.6	7.8	7.8	8.8	8.0	9.4	8.7	7.5	7.4
8	8.6	8.4	7.6	7.5	7.8	7.7	8.8	8.5	9.4	8.8	7.6	7.5
9	8.5	8.4	7.6	7.5	7.9	7.8	8.9	8.4	8.9	8.5	7.6	7.5
10	8.7	8.4	7.8	7.6	7.9	7.8	8.9	8.5	8.7	8.2	7.7	7.5
11	8.8	8.4	7.9	7.8	8.0	7.8	8.8	8.3	8.3	8.1	7.7	7.5
12	8.7	8.5	7.9	7.9	8.1	7.8	8.4	7.5	8.1	7.5	7.9	7.6
13	8.5	8.4	8.1	7.9	8.3	7.9	7.8	7.5	7.9	7.8	8.0	7.5
14	8.6	8.3	8.1	7.8	8.5	8.0	7.7	7.5	7.9	7.8	8.0	7.5
15	8.7	8.2	8.2	7.8	8.7	8.1	7.7	7.5	7.9	7.8	7.7	7.3
16	8.7	8.3	8.2	7.9	8.8	8.1	7.8	7.5	7.9	7.7	7.7	7.3
17	8.8	8.3	8.4	7.8	8.8	8.3	7.8	7.6	8.2	7.8	7.8	7.4
18	8.9	8.4	8.5	7.9	8.8	8.2	7.8	7.6	8.7	8.1	7.9	7.4
19	9.0	8.3	8.4	8.0	8.9	8.5	7.8	7.7	8.9	8.4	7.9	7.6
20	9.1	8.7	8.3	7.8	8.9	8.4	8.0	7.7	9.0	8.5	7.9	7.7
21	8.8	8.7	8.3	7.6	8.6	7.5	8.4	7.7	8.9	8.4	7.8	7.1
22	9.1	8.6	8.5	7.5	8.6	8.1	9.0	8.0	8.9	8.3	7.1	7.0
23	9.2	8.8	8.6	7.9	8.7	7.5	8.9	8.5	8.9	8.4	7.2	7.0
24	9.2	8.8	8.5	8.2	8.8	8.2	8.9	8.2	8.6	8.0	7.2	7.0
25	9.2	8.7	8.2	7.4	8.8	8.3	8.5	7.7	8.0	7.7	7.2	7.1
26	9.1	8.6	7.5	7.4	8.6	7.5	8.1	7.6	7.9	7.7	7.3	7.2
27	9.1	8.8	7.6	7.5	7.6	7.5	7.8	7.5	7.9	7.7	7.3	7.2
28	9.1	8.7	7.7	7.5	7.7	7.5	7.8	7.5	8.3	7.7	7.6	7.5
29	8.8	8.7	7.7	7.7	7.7	7.5	8.0	7.6	8.3	7.9	7.6	7.5
30	8.9	8.6	7.8	7.7	7.8	7.7	7.9	7.7	8.4	8.1	7.6	7.5
31	---	---	7.8	7.7	---	---	7.9	7.8	8.4	8.1	---	---
MONTH	9.2	8.2	8.8	7.4	8.9	7.3	9.0	7.5	9.4	7.5	8.2	7.0
YEAR	9.4	7.0										

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.2	6.1	10.6	7.5	10.2	9.7	15.0	13.3	15.0	15.0	11.3	11.2
2	8.7	6.6	9.0	7.5	10.2	9.8	15.0	13.2	15.0	15.0	11.4	11.0
3	9.2	6.4	10.1	7.1	10.0	9.3	15.0	13.3	15.0	15.0	12.0	11.2
4	10.2	7.2	9.7	7.6	11.4	9.7	13.4	11.9	15.0	13.3	12.6	11.9
5	10.8	7.7	9.9	7.8	12.3	11.0	12.2	10.8	13.3	10.7	12.5	11.8
6	11.2	7.6	10.2	8.2	13.5	12.3	13.6	11.8	11.2	10.5	12.0	11.1
7	12.6	7.4	9.7	7.7	13.9	13.0	13.8	12.2	10.5	9.9	11.8	11.0
8	11.9	7.5	10.2	7.9	14.1	13.2	14.5	12.4	10.2	9.6	12.8	11.8
9	9.3	6.6	9.4	7.7	13.8	12.2	15.0	13.1	9.6	8.0	13.3	10.4
10	8.9	5.5	8.4	7.1	13.9	11.8	15.0	12.7	8.6	7.8	12.6	12.1
11	8.5	6.1	7.8	6.8	12.8	11.2	14.7	12.6	8.5	8.3	13.0	12.1
12	7.3	5.6	7.4	6.6	11.2	10.3	15.0	12.1	9.2	8.5	12.9	11.6
13	6.0	5.0	7.5	6.2	10.6	10.0	13.5	12.6	9.2	8.4	11.6	10.9
14	5.7	4.5	9.5	7.3	12.1	10.6	13.3	11.8	8.5	8.0	10.9	10.2
15	6.4	4.9	11.0	9.3	13.1	11.9	14.9	11.8	8.5	8.2	10.2	9.7
16	7.6	5.7	11.4	10.0	12.6	11.9	15.0	12.9	8.6	8.3	10.7	10.1
17	8.3	7.1	11.7	10.4	13.0	11.6	14.6	12.7	9.2	8.2	11.3	10.7
18	8.8	7.4	11.7	10.5	12.9	11.7	14.4	12.6	10.5	9.1	11.9	11.2
19	9.3	7.6	11.2	10.0	12.1	11.4	14.5	12.9	10.7	10.5	11.7	11.4
20	9.5	8.0	10.4	9.5	12.8	10.9	15.0	12.7	10.7	10.5	12.2	11.2
21	11.2	7.6	11.2	9.7	12.9	11.7	13.2	12.0	11.1	10.7	12.7	11.8
22	12.9	8.2	11.4	9.9	13.6	12.0	---	---	11.4	11.1	11.9	11.1
23	12.8	8.9	13.1	11.3	12.6	11.8	---	---	11.7	11.3	12.9	10.9
24	12.1	8.9	13.6	12.5	13.1	11.9	---	---	11.8	11.5	13.5	11.8
25	11.4	8.3	13.0	12.5	13.3	12.5	---	---	11.5	11.3	13.9	11.7
26	10.7	7.8	12.5	12.1	13.3	12.4	---	---	11.4	10.6	13.8	11.4
27	11.4	7.8	12.7	12.4	13.1	12.3	---	---	10.9	10.4	13.5	10.9
28	9.9	7.5	12.3	11.3	13.3	12.3	---	---	11.4	10.9	13.5	10.3
29	8.2	6.8	11.4	10.9	14.1	11.7	15.0	14.8	---	---	12.4	9.9
30	11.2	6.0	10.9	10.2	14.5	13.1	15.0	12.9	---	---	14.2	9.9
31	11.3	7.5	---	---	15.0	13.1	15.0	13.7	---	---	12.7	---
MONTH	12.9	4.5	13.6	6.2	15.0	9.3	---	---	15.0	7.8	14.2	9.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	9.2	12.0	9.0	6.7	6.1	4.8	4.2	6.4	5.1	6.9	4.2
2	12.0	8.9	11.0	8.1	6.7	5.8	5.0	4.0	6.4	4.9	6.7	3.6
3	13.1	10.0	12.5	9.6	6.7	5.9	5.8	4.7	8.4	5.0	6.0	4.2
4	14.9	11.4	12.4	7.7	6.0	5.8	7.6	4.7	9.8	5.4	5.7	3.9
5	14.7	12.2	11.6	7.9	6.1	5.8	6.9	4.6	11.0	2.0	6.7	3.8
6	14.1	12.1	9.1	6.3	6.1	5.9	11.3	4.6	6.0	2.0	5.2	4.0
7	14.0	11.9	7.4	6.7	6.1	6.0	14.3	6.8	5.3	2.0	4.9	4.4
8	12.7	10.6	7.6	7.1	6.2	5.9	12.4	2.8	6.9	2.1	5.1	4.5
9	11.0	9.4	7.5	7.4	6.9	6.2	11.3	2.8	8.8	2.1	4.8	4.4
10	12.2	8.9	7.7	7.5	7.1	6.7	11.5	6.0	8.5	4.1	5.3	4.2
11	12.4	9.4	7.7	7.2	7.5	6.7	12.4	5.1	7.1	2.7	5.9	4.1
12	11.5	8.8	7.9	7.4	8.5	6.4	8.4	4.7	9.2	3.6	7.3	3.8
13	9.4	7.9	8.7	7.8	9.5	6.4	5.8	5.1	7.7	3.6	8.3	5.5
14	12.1	8.0	8.4	7.7	11.8	6.6	5.5	5.3	6.1	2.6	9.2	6.2
15	12.8	8.8	8.6	7.5	13.2	7.1	5.5	5.2	5.1	2.1	9.5	5.2
16	13.3	8.9	8.5	6.4	14.4	4.1	5.5	5.2	5.6	2.2	10.3	5.5
17	14.0	8.5	9.3	6.0	12.3	4.0	5.5	5.3	7.6	3.0	11.5	5.9
18	14.4	8.6	10.7	5.9	12.3	4.2	6.2	5.3	---	---	12.3	6.6
19	14.6	9.4	10.6	5.8	12.5	3.9	6.5	5.0	---	---	12.5	6.8
20	14.5	9.5	10.1	5.4	11.6	4.1	7.9	5.9	12.1	5.8	11.8	6.9
21	12.2	9.2	10.4	4.8	9.9	4.9	12.8	6.5	11.4	4.1	9.4	5.0
22	15.0	8.5	11.9	6.2	10.2	3.7	15.0	3.9	11.8	3.8	6.6	5.6
23	15.0	10.0	10.8	6.5	11.9	4.4	10.6	3.6	11.2	3.9	6.2	5.1
24	14.3	10.0	9.3	5.8	12.8	4.9	10.7	3.6	8.8	4.1	6.6	5.9
25	14.2	9.4	6.3	5.6	12.6	5.4	9.6	5.8	8.4	3.7	7.1	6.4
26	13.3	8.9	7.3	6.3	7.9	3.6	6.5	5.0	7.8	3.2	7.4	6.6
27	12.4	8.7	7.7	7.3	5.0	4.5	5.8	5.2	7.1	3.4	6.9	6.1
28	12.8	8.9	7.9	7.6	5.2	5.0	6.2	5.4	9.3	4.1	6.3	5.6
29	13.7	9.1	7.6	7.4	5.2	4.7	6.3	5.3	10.6	5.0	5.9	5.0
30	13.9	9.6	7.3	6.6	4.7	4.5	5.7	5.2	10.3	5.2	5.3	4.9
31	---	---	6.6	6.1	---	---	6.1	5.2	9.1	4.2	---	---
MONTH	15.0	7.9	12.5	4.8	14.4	3.6	15.0	2.8	12.1	2.0	12.5	3.6
YEAR	15.0	2.0										

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	13.5	13.0	12.0	10.5	7.5	1.0	0.5	0.5	0.0	6.0	4.0
2	17.5	13.5	12.0	10.5	10.0	8.5	1.0	0.5	0.5	0.5	5.5	4.0
3	16.5	14.0	10.5	9.5	10.5	8.0	1.0	0.5	0.5	0.5	4.5	2.0
4	14.5	12.0	10.0	9.5	9.5	6.5	1.0	0.0	0.5	0.5	3.0	0.5
5	15.0	12.5	9.5	8.0	6.5	3.0	0.5	0.0	0.5	0.5	3.0	0.5
6	17.5	14.0	10.5	8.0	3.0	1.0	0.5	0.5	0.5	0.5	4.0	2.5
7	18.0	15.5	11.0	8.5	2.0	1.0	1.0	0.5	0.5	0.5	3.0	1.5
8	19.0	16.5	11.0	8.5	3.0	1.0	1.0	0.5	0.5	0.5	1.5	0.0
9	19.0	17.5	11.5	10.0	5.5	3.0	1.0	0.5	0.5	0.0	2.5	0.0
10	18.5	15.5	12.0	11.0	4.5	3.5	1.0	0.5	0.5	0.5	2.5	1.5
11	16.0	13.0	11.5	10.0	4.5	4.0	1.0	0.5	0.5	0.5	3.0	2.0
12	16.0	15.5	11.5	11.0	4.5	3.5	1.0	0.5	0.5	0.0	4.5	2.5
13	17.5	16.0	11.0	10.0	4.0	3.5	1.0	0.0	0.5	0.0	4.5	3.5
14	18.5	17.0	10.0	5.5	3.5	2.5	0.5	0.5	0.5	0.5	8.5	4.5
15	17.0	14.0	6.0	5.0	2.0	1.0	0.5	0.5	0.5	0.5	9.0	7.0
16	14.0	11.5	5.0	3.5	2.0	1.0	0.5	0.5	0.5	0.5	7.0	5.0
17	12.5	9.5	5.0	3.5	2.5	2.0	0.5	0.5	0.5	0.5	5.5	4.0
18	13.0	9.5	6.0	4.0	3.0	2.0	0.5	0.5	0.5	0.5	4.5	4.0
19	13.5	10.5	7.0	4.5	4.5	3.5	0.5	0.5	0.5	0.5	4.0	3.5
20	12.5	12.0	7.5	6.0	3.5	3.0	0.5	0.5	0.5	0.5	3.5	2.5
21	14.0	12.5	6.5	4.5	3.0	1.5	0.5	0.5	0.5	0.5	5.0	2.0
22	14.5	12.5	7.0	3.5	2.5	1.5	---	---	0.5	0.0	5.5	4.5
23	15.0	12.0	3.5	0.0	3.5	1.5	---	---	0.5	0.0	4.5	2.5
24	14.5	12.0	1.5	0.5	1.5	0.0	---	---	0.5	0.0	4.5	1.5
25	15.5	13.0	1.0	0.5	0.5	0.0	---	---	2.0	0.5	5.5	2.0
26	15.0	13.5	0.5	0.5	0.5	0.0	---	---	5.0	1.5	7.0	3.0
27	16.5	13.5	3.5	2.0	0.5	0.0	---	---	5.0	4.5	7.0	4.5
28	16.0	15.0	5.0	3.5	0.5	0.5	---	---	4.5	3.5	9.5	6.0
29	15.5	14.0	7.0	5.0	1.0	0.5	0.5	0.5	---	---	8.0	5.5
30	15.0	12.0	7.5	7.0	1.0	0.5	0.5	0.0	---	---	9.0	4.0
31	14.0	12.0	---	---	0.5	0.5	0.5	0.0	---	---	11.0	5.5
MONTH	19.0	9.5	13.0	0.0	10.5	0.0	---	---	5.0	0.0	11.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.0	14.5	11.0	20.5	19.0	27.5	26.0	24.5	19.5	23.5	21.5
2	9.0	6.5	12.5	11.0	19.0	18.0	26.0	24.5	25.5	21.0	22.5	20.0
3	7.5	5.5	15.5	9.5	19.5	17.5	26.5	22.5	25.0	22.5	22.5	21.0
4	9.0	4.5	14.0	10.0	21.5	19.5	26.5	22.5	23.5	20.0	23.0	21.5
5	7.0	5.5	14.0	11.0	22.5	21.0	25.0	23.5	24.0	19.5	25.5	21.5
6	8.5	4.0	13.5	11.5	23.0	22.0	27.0	22.0	25.0	19.5	24.5	22.5
7	10.0	5.0	12.5	11.5	23.5	21.5	27.5	23.0	25.5	20.5	23.0	21.5
8	13.0	7.0	13.5	11.0	23.0	20.0	26.5	24.0	26.0	21.5	24.5	21.5
9	14.0	9.5	14.0	12.5	21.0	19.0	27.0	25.0	26.5	22.5	26.0	23.0
10	14.5	8.5	16.5	13.0	22.0	18.0	26.0	24.0	28.5	24.0	25.5	22.5
11	15.5	10.0	16.5	15.5	21.5	19.5	25.5	23.0	27.5	24.5	24.5	23.0
12	18.0	12.5	16.0	15.0	24.0	20.5	24.0	22.0	26.0	21.5	23.0	21.0
13	16.0	12.0	15.5	13.0	26.0	22.0	24.0	22.5	26.0	21.5	21.5	19.5
14	14.5	10.5	17.5	13.5	27.0	23.0	24.0	22.0	26.0	22.0	22.5	18.0
15	15.5	10.5	19.5	15.0	26.5	23.5	24.0	21.0	25.0	23.0	22.5	20.0
16	17.0	11.5	21.0	17.5	26.5	22.0	25.0	21.5	25.5	21.5	21.0	18.5
17	18.5	14.5	23.0	17.5	27.0	22.0	25.0	22.5	25.5	20.0	21.0	18.5
18	20.0	15.0	24.5	19.5	27.0	22.5	25.0	21.0	26.0	21.0	20.5	17.5
19	19.0	13.5	23.5	20.5	28.5	24.0	24.0	22.0	26.0	22.5	19.0	17.5
20	20.5	13.5	21.5	18.5	29.0	24.5	23.5	20.0	27.0	23.5	19.0	17.5
21	17.5	13.0	22.0	17.5	28.0	25.0	25.0	20.0	27.5	24.5	17.0	15.5
22	16.0	11.0	21.5	17.0	27.5	23.0	26.0	21.0	28.0	23.5	17.5	15.5
23	17.0	11.0	20.5	16.5	27.5	23.0	25.5	22.0	26.5	23.5	18.0	16.0
24	15.0	10.0	20.5	18.0	27.5	24.0	24.5	22.0	24.0	20.5	17.5	14.5
25	16.5	10.0	18.5	15.0	28.5	24.0	24.0	21.5	25.0	21.0	16.0	14.0
26	16.0	12.0	15.0	13.0	26.0	22.5	23.5	22.5	24.5	22.0	16.0	14.0
27	13.5	11.0	13.0	12.0	25.0	22.0	23.5	20.5	23.0	20.5	18.5	15.5
28	11.5	10.0	15.0	12.5	26.5	24.0	22.0	20.5	22.5	19.5	21.0	18.0
29	11.5	9.0	17.0	14.5	27.5	25.0	24.0	20.0	24.0	19.0	22.5	20.5
30	15.5	9.0	19.5	15.0	28.0	25.5	22.5	21.0	25.0	20.5	24.0	21.5
31	---	---	21.5	17.0	---	---	23.0	19.0	26.0	22.0	---	---
MONTH	20.5	4.0	24.5	9.5	29.0	17.5	27.5	19.0	28.5	19.0	26.0	14.0
YEAR	29.0	0.0										

04187500 OTTAWA RIVER AT ALLENTOWN, OHIO

LOCATION.--Lat 40°45'18", long 84°11'41", NW 1/4 sec. 29, T.3 S., R.6 E., Allen County, at gaging station, on right bank at downstream side of bridge on State Highway 81 at Allentown, 0.3 mile downstream from Kessler Run, and 1.5 miles upstream from McBride Ditch.

DRAINAGE AREA.--160 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1969 to September 1971.
Water temperatures: March 1969 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 2,590 micromhos Jan. 23; minimum, 277 micromhos Feb. 23.
Water temperatures: Maximum, 30.0°C June 28-30; minimum, freezing point on several days during November, January, and March.

Period of record:
Specific conductance (1970-71): Maximum, 2,590 micromhos Jan. 23, 1971; minimum, 277 micromhos Feb. 23, 1971.
Water temperatures (1969-71): Maximum, 31.5°C June 29, 1970; minimum, freezing point on many days during 1969, 1970 and 1971.

REMARKS.--Continuous water-quality recorder operated since March 1969. Minimum recorded specific conductance value of 180 micromhos occurred May 18, 19, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT.												
05...	1200	20	--	--	--	--	--	--	--	--	--	--
07...	1700	21	0	0	340	140	1.2	62	1010	350	1670	4.0
15...	1830	33	282	0	440	160	1.5	210	1000	430	2010	6.8
NOV.												
14...	1000	21	198	0	320	160	1.6	150	908	350	1600	6.9
25...	0700	21	0	0	470	240	1.5	190	1320	450	2120	4.4
DEC.												
08...	1245	23	194	0	430	250	1.6	150	1240	440	2150	6.8
27...	1730	25	8	0	240	110	1.2	78	744	300	1120	6.3
JAN.												
17...	1500	26	254	0	440	250	1.5	180	1280	440	2150	7.0
23...	1500	25	253	0	490	380	1.6	180	1510	440	2590	6.9
FEB.												
03...	1700	27	58	0	480	320	1.3	280	1480	410	2550	6.1
17...	1730	54	140	0	130	170	.5	31	554	190	1000	6.7
MAR.												
04...	1530	27	234	0	360	180	.4	180	978	390	1730	7.2
06...	1000	39	83	0	150	68	.4	86	512	280	749	7.6
APR.												
15...	1005	48	144	0	300	140	.5	130	822	400	1390	6.7
28...	1630	31	214	0	460	180	1.0	190	1170	500	1970	7.1
MAY												
02...	1700	29	176	0	480	180	2.0	140	1190	650	1960	6.8
26...	0700	1700	76	0	57	15	.3	61	224	160	382	6.7
JUNE												
01...	1430	83	124	0	250	63	.7	120	726	400	1130	6.6
14...	1335	280	208	0	230	50	.8	71	648	430	1030	7.0
JULY												
07...	1645	25	0	0	380	155	1.0	190	992	460	1640	4.2
28...	1730	32	44	0	290	100	.9	130	786	380	1240	7.6
AUG.												
05...	1300	33	0	0	360	150	1.3	200	1030	430	1640	4.3
24...	1630	27	0	0	500	200	1.4	180	1310	530	1970	4.3
SEP.												
20...	1645	30	0	0	280	180	1.0	220	936	350	1660	4.0

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.								
05...	42	0	0	1	4	1	.7	220
MAY								
20...	26	--	--	--	--	--	3.8	--

04187500 OTTAWA RIVER AT ALLENTOWN, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2220	1780	2210	1990	2180	2090	2300	1990	1890	1270	1230	843
2	2310	2020	2240	1780	2260	2030	2400	2110	2220	1880	1420	1230
3	2330	1990	2110	1900	2350	2160	2350	2110	2550	1910	1540	1300
4	2400	2170	2120	2010	2350	2160	2110	1150	2090	1900	1710	1480
5	2440	2200	2370	2040	2320	2290	1560	1140	2160	1390	1670	850
6	2450	2190	2250	2010	---	---	1880	1560	1460	1210	1000	739
7	2370	2070	2100	2010	---	---	2050	1850	1970	1460	1300	739
8	2340	2100	2020	1510	2180	2070	2130	1820	2030	1750	1330	884
9	2230	1870	2010	1740	2220	2050	2090	1840	2470	1940	1260	943
10	1980	1800	2020	1900	2230	2070	2270	1950	2540	1080	1650	948
11	2050	1390	2030	1910	2270	1440	2160	1920	---	---	---	---
12	2210	2010	1990	1640	1900	1250	2150	1870	---	---	---	---
13	2010	1390	1940	1640	1640	1270	2170	1920	---	---	---	---
14	1850	1680	2080	1770	1840	1340	2170	1910	---	---	---	---
15	1830	1500	2070	1840	1810	1670	2160	1960	---	---	---	---
16	2010	1730	2070	1920	1960	1750	2170	1660	---	---	---	---
17	2010	1740	2000	1440	1960	1330	2250	2030	1000	627	---	---
18	2020	1840	1780	1420	1920	1540	2510	2030	658	326	---	---
19	2120	1880	2020	1760	2040	1800	2290	1830	397	335	---	---
20	2120	1900	2090	1870	2060	1820	2320	1920	377	310	---	---
21	2140	1720	2170	2010	2100	1970	2350	2170	456	322	---	---
22	1850	1660	2240	2030	2260	1620	2390	2090	497	382	---	---
23	2110	1850	2290	2190	1830	1580	2590	2060	339	277	1140	772
24	2120	1970	2450	2090	1800	1630	2420	2070	649	339	1370	801
25	2110	1960	2380	2000	2110	1520	2530	2420	1020	649	1400	875
26	2110	1920	2040	1730	2040	1610	2580	2180	1200	702	1370	930
27	2150	2040	1920	1520	2090	1120	2430	2180	702	615	1500	1090
28	2120	1920	2060	1880	2350	2090	2490	1560	843	647	1490	980
29	2130	1970	2220	2030	2400	1970	1560	673	---	---	1180	990
30	2030	1850	2200	2060	2170	2030	1060	683	---	---	1310	1020
31	2070	1860	---	---	2080	1970	1270	1060	---	---	1810	1310
MONTH	2450	1390	2450	1420	2400	1120	2590	673	2550	277	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1530	971	1790	1000	1120	1030	1940	1550	1640	1500	1810	1540
2	1850	1260	---	---	1050	368	1940	1580	1650	1520	1840	1270
3	1540	1310	---	---	563	348	2030	1620	1640	1520	1770	1300
4	1570	1290	---	---	782	563	1800	1630	1700	1600	1830	1140
5	1530	1280	---	---	1040	782	1790	1690	1770	1660	1380	948
6	1640	1330	---	---	1020	927	1750	1650	1800	1680	1570	910
7	1740	1630	---	---	1110	1010	1890	1530	1860	1730	1340	911
8	1740	1610	---	---	1230	935	1710	1610	1920	1760	1450	1270
9	1740	1610	---	---	1410	1220	1910	1630	1890	1750	1520	1400
10	1820	1700	---	---	1620	1410	1870	1080	1910	1670	1750	1440
11	1880	1460	---	---	1670	1280	1290	576	1740	1000	1710	1460
12	1510	1470	---	---	1670	1460	930	563	1500	1200	1740	1560
13	1640	1450	---	---	1580	1470	1820	936	1750	1500	1810	1580
14	1470	1250	---	---	1790	614	1960	1780	1810	1610	1810	1690
15	1540	1390	---	---	774	599	1990	1670	1780	1610	1850	1600
16	1660	1520	---	---	1390	764	1860	1670	1820	1420	1820	1590
17	1750	1600	---	---	1470	1130	1800	1420	1840	1570	1870	1660
18	1830	1660	---	---	1450	1270	1520	1170	1840	1590	1910	1730
19	1750	1590	---	---	1610	1420	1650	1480	2050	1620	2010	1740
20	1660	1510	---	---	1580	1440	1630	1490	1960	1700	1970	874
21	1670	1540	---	---	1620	1360	1650	1420	1850	1430	1360	880
22	1680	1460	---	---	1680	1380	1630	1490	1970	1760	1480	1360
23	1750	1530	---	---	1850	1570	1660	1510	2000	1770	1510	1450
24	1910	1610	---	---	1880	1520	1600	591	2030	1720	1600	1460
25	1890	1660	---	---	1670	1070	972	657	1970	1710	1600	1460
26	1860	1740	---	---	1070	497	1220	960	1960	1670	1610	1250
27	1850	1680	---	---	981	773	1280	1170	1890	1220	1300	1150
28	1950	1510	---	---	1380	920	1410	1200	1770	1530	1650	1290
29	1860	1480	---	---	1700	1220	1650	1240	1780	1540	1730	1470
30	1980	1790	---	---	1920	1600	1610	1380	1820	1610	1690	1490
31	---	---	---	---	---	---	1510	1030	1740	1500	---	---
MONTH	1980	971	---	---	1920	348	2030	563	2050	1000	2010	874
YEAR	2590	277										

04187500 OTTAWA RIVER AT ALLENTOWN, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	15.0	12.0	11.0	11.0	7.0	3.0	1.0	2.0	1.0	8.5	5.5
2	18.5	15.5	11.5	10.5	7.0	4.0	4.5	2.5	1.0	1.0	8.5	4.5
3	17.5	16.0	11.5	9.5	4.0	2.0	5.0	3.0	1.0	1.0	6.0	2.0
4	16.0	13.5	10.0	9.5	3.5	1.5	7.0	4.0	1.0	0.5	6.5	3.0
5	16.5	13.5	12.0	9.5	4.0	3.0	4.0	0.5	4.5	0.5	10.5	5.5
6	19.0	16.0	12.5	10.0	---	---	0.5	0.5	3.0	0.5	11.0	5.0
7	19.5	17.5	13.0	10.0	---	---	0.5	0.0	1.0	0.5	9.5	4.5
8	20.5	18.0	14.0	13.0	5.5	4.5	0.5	0.5	3.0	0.5	9.0	6.5
9	21.0	19.0	13.0	12.5	8.0	5.5	0.5	0.0	5.5	3.0	8.0	4.0
10	20.0	17.0	13.0	11.0	7.0	6.0	0.5	0.0	5.0	4.0	10.0	4.0
11	17.0	14.5	11.0	6.5	9.0	6.5	0.0	0.0	---	---	---	---
12	19.0	16.5	9.0	6.0	8.5	6.5	1.5	0.0	---	---	---	---
13	20.0	14.0	7.0	5.5	6.5	5.0	2.5	1.5	---	---	---	---
14	20.5	19.5	7.0	5.0	5.5	4.0	5.0	2.5	---	---	---	---
15	19.5	15.0	9.0	6.5	4.5	3.0	4.5	2.0	---	---	---	---
16	15.0	12.0	9.5	8.0	6.5	4.0	2.0	1.0	---	---	---	---
17	13.0	10.5	10.5	8.5	7.5	6.5	2.0	0.0	3.5	2.5	---	---
18	14.5	11.0	8.5	6.5	7.0	6.0	5.0	0.0	3.0	2.0	---	---
19	15.0	11.5	8.5	6.0	9.0	7.0	5.0	0.5	3.5	2.0	---	---
20	14.0	13.5	6.0	0.0	7.0	5.5	0.5	0.5	3.0	2.0	---	---
21	16.5	14.5	1.0	0.0	5.5	4.0	0.5	0.0	2.5	2.0	---	---
22	16.5	15.0	1.0	0.0	8.0	4.5	0.0	0.0	3.0	1.5	---	---
23	16.5	13.5	4.5	1.0	8.5	6.0	0.0	0.0	1.5	1.0	---	---
24	16.5	14.5	6.5	4.5	6.0	2.0	0.0	0.0	3.5	1.5	5.5	1.0
25	17.5	15.0	9.0	8.5	3.0	1.5	0.0	0.0	6.0	2.5	4.5	0.0
26	17.0	15.0	10.5	8.5	2.0	1.0	0.0	0.0	7.5	6.0	4.5	1.0
27	18.5	15.5	10.5	9.0	2.0	1.0	0.0	0.0	7.5	5.5	6.5	1.5
28	17.5	16.0	12.5	9.0	2.5	1.0	2.5	0.0	7.0	5.0	6.5	3.5
29	16.0	14.0	12.0	10.0	4.0	2.5	4.0	2.5	---	---	8.5	5.0
30	15.5	13.5	11.5	9.5	3.0	1.0	3.5	1.5	---	---	8.0	5.0
31	14.0	12.0	---	---	4.0	3.0	3.0	2.0	---	---	8.0	2.5
MONTH	21.0	10.5	14.0	0.0	11.0	1.0	7.0	0.0	7.5	0.5	11.0	5.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	8.5	16.5	13.0	22.5	21.0	29.5	26.5	25.5	21.0	26.0	24.0
2	9.0	6.0	---	---	21.0	18.5	27.0	24.5	26.5	22.5	25.0	24.5
3	9.0	5.0	---	---	20.5	18.0	27.5	23.5	25.0	23.5	25.5	24.0
4	8.0	5.0	---	---	23.5	19.5	28.0	24.0	23.5	22.5	26.0	24.5
5	7.0	4.0	---	---	26.0	21.5	26.5	24.5	24.5	21.0	28.0	24.0
6	8.5	4.0	---	---	26.0	23.5	28.5	23.5	27.0	21.5	27.0	24.5
7	11.5	5.5	---	---	26.0	22.5	28.5	24.0	26.0	22.0	28.0	24.0
8	14.5	8.5	---	---	25.0	22.5	27.5	25.0	28.0	23.0	28.5	25.0
9	14.5	10.5	---	---	23.0	20.0	28.0	25.5	28.0	23.5	28.5	25.0
10	14.5	9.0	---	---	24.0	19.0	26.5	24.5	29.0	25.0	28.0	25.0
11	16.5	10.5	---	---	23.5	21.5	25.5	23.0	27.0	24.5	26.5	25.0
12	19.0	13.5	---	---	26.0	22.5	25.5	21.5	26.0	22.0	25.0	23.0
13	16.5	12.5	---	---	27.5	24.0	26.5	23.0	26.5	22.0	23.5	21.5
14	14.5	10.0	---	---	26.0	24.0	26.5	22.5	27.0	23.0	24.5	20.0
15	16.0	11.0	---	---	25.0	22.5	26.5	22.5	25.5	23.5	24.5	22.5
16	17.5	12.5	---	---	26.5	21.5	27.0	23.0	26.0	22.5	23.0	21.0
17	19.0	15.5	---	---	27.0	22.5	26.5	23.5	25.5	21.5	23.0	20.5
18	20.5	15.5	---	---	28.0	23.5	25.5	22.0	26.5	22.5	22.5	19.5
19	19.5	14.0	---	---	29.0	24.5	26.0	23.5	26.5	23.0	21.5	20.0
20	20.5	14.5	---	---	29.0	25.0	26.0	22.0	27.0	24.0	21.0	19.0
21	18.5	13.5	---	---	28.0	25.5	27.0	22.5	27.5	25.0	19.5	17.0
22	16.0	12.0	---	---	27.5	23.5	27.5	23.0	28.0	24.5	21.0	17.0
23	17.0	12.0	---	---	27.5	23.5	27.0	24.0	27.0	24.0	21.5	18.5
24	16.5	12.0	---	---	28.5	24.5	26.0	23.0	26.0	21.5	19.5	16.5
25	17.5	11.5	---	---	28.5	24.0	25.5	22.0	26.0	23.5	18.0	16.0
26	17.5	13.0	---	---	24.5	21.5	26.0	24.0	26.5	24.0	20.0	16.0
27	14.5	12.5	---	---	28.5	23.5	25.0	21.5	25.0	23.5	23.5	19.5
28	13.5	11.5	---	---	30.0	25.5	24.0	21.5	25.0	22.5	25.0	24.5
29	12.5	11.0	---	---	30.0	26.0	25.5	22.0	26.5	22.0	26.0	23.0
30	16.5	10.5	---	---	30.0	26.5	24.0	22.0	27.5	23.5	26.5	23.5
31	---	---	---	---	---	---	24.5	20.0	27.5	24.5	---	---
MONTH	20.5	4.0	---	---	30.0	18.0	29.5	20.0	29.0	21.0	28.5	16.0
YEAR	30.0	0.0										

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04188200 AUGLAIZE RIVER AT CLOVERDALE, OHIO

LOCATION.--Lat 41°01'08", long 84°17'20", Putnam County, on left bank at old bridge abutment, 0.2 mile upstream from bridge on State Route 114, 2.5 miles upstream from Blanchard River, 4.5 miles downstream from Ottawa River, and 0.8 mile east of Cloverdale.

DRAINAGE AREA.--713 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1967 to September 1971.
Water temperatures: June 1967 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,850 micromhos Jan. 31; minimum, 222 micromhos Feb. 20.
Water temperatures: Maximum, 29.5°C Aug. 11; minimum, freezing point on many days during January to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.							
03...	1425	172	0	170	70	1.5	64
05...	1330	--	--	--	--	--	--
12...	1600	214	0	370	150	1.3	180
NOV.							
09...	1635	111	0	320	140	1.4	130
30...	1425	118	0	190	83	1.1	91
DEC.							
08...	1515	182	0	210	94	.7	55
14...	1640	151	0	140	59	.4	46
JAN.							
04...	1500	152	0	220	100	.6	85
28...	1345	156	0	310	170	1.0	110
FEB.							
11...	1210	114	0	110	62	.4	39
22...	1445	69	0	41	19	.3	25
MAR.							
15...	1135	134	0	77	28	.3	59
29...	1235	177	0	160	62	.4	70
APR.							
01...	1520	200	0	170	61	.4	44
29...	1730	196	0	220	110	.7	48
MAY							
04...	1500	206	0	230	98	.8	48
20...	1715	--	--	--	--	--	--
27...	1235	108	0	54	18	.3	55
JUNE							
24...	1625	152	0	200	72	.7	69
28...	1400	127	0	65	20	.3	46
JULY							
07...	1400	166	0	200	62	.8	75
15...	1300	132	0	58	21	.4	32
29...	1100	--	--	--	--	--	--
AUG.							
05...	1020	164	0	160	55	.7	53
30...	1315	130	0	340	150	1.2	84
SEP.							
02...	1220	132	0	280	130	1.0	77
23...	1330	138	0	93	41	.4	38

04188200 AUGLAIZE RIVER AT CLOVERDALE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-71): Maximum, 1,870 micromhos Jan. 13, 1970; minimum, 222 micromhos Feb. 20, 1971.
pH (1969-70): Maximum, 10.5 Dec. 4-6, 18-26, 1969, Jan. 2, 6, 1970; minimum, 4.5 Oct. 3, 1969.
Water temperatures (1969-71): Maximum, 29.5°C July 2, 1970, Aug. 11, 1971; minimum, freezing point on many days during December 1969, January 1970, and January to March 1971.

REMARKS.--Continuous water-quality recorder operated since June 1967. Maximum recorded water temperatures of 31.0°C occurred Aug. 23, 24, 1968. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected three time during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.						
03...	586	340	200	881	--	--
05...	--	--	--	--	24	.0
12...	980	390	210	1680	--	--
NOV.						
09...	894	420	330	1380	--	--
30...	598	320	220	938	--	--
DEC.						
08...	744	400	251	1100	--	--
14...	536	310	186	806	--	--
JAN.						
04...	730	380	260	1080	--	--
28...	1000	440	310	1550	--	--
FEB.						
11...	412	220	130	657	--	--
22...	202	110	54	300	--	--
MAR.						
15...	372	240	130	549	--	--
29...	608	360	210	895	--	--
APR.						
01...	582	370	200	880	--	--
29...	744	400	240	1110	--	--
MAY						
04...	766	400	230	1130	--	--
20...	--	--	--	--	12	6.6
27...	320	190	100	431	--	--
JUNE						
24...	592	360	240	971	--	--
28...	302	200	96	476	--	--
JULY						
07...	632	380	240	1000	--	--
15...	266	190	82	430	--	--
29...	--	--	--	--	--	1.4
AUG.						
05...	526	310	180	831	--	--
30...	968	440	330	1460	--	--
SEP.						
02...	826	390	280	1250	--	--
23...	380	220	110	589	--	--

04188200 AUGLAIZE RIVER AT CLOVERDALE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1140	1110	1370	1340	846	834	1170	1070	---	---	567	519
2	1200	1140	1380	1340	---	---	1280	1170	---	---	609	564
3	1190	1150	1370	1350	---	---	1320	1220	---	---	645	603
4	1160	1110	1360	1310	---	---	1230	913	---	---	693	642
5	1140	1090	1320	1310	---	---	1130	905	---	---	768	675
6	1230	1130	1340	1320	---	---	---	---	648	501	807	768
7	1310	1230	1330	1280	---	---	---	---	501	459	834	747
8	1340	1310	1290	1280	1140	1130	---	---	458	428	843	714
9	1330	1300	1310	1270	1180	1130	---	---	494	431	771	705
10	1400	1230	1340	1280	1210	1180	---	---	557	488	741	696
11	1460	1400	1340	1230	1210	1180	1170	1030	714	551	801	690
12	1580	1460	1330	1220	1200	791	1190	1160	729	594	891	747
13	1580	1460	1360	1330	863	770	1160	1130	846	690	747	627
14	1460	1160	1350	1250	788	743	1150	1130	1170	846	639	558
15	1180	1010	1250	1220	791	770	1240	1130	1000	837	570	543
16	1060	933	1220	1160	824	773	1360	1240	837	765	564	522
17	936	900	1160	1110	872	824	1300	1240	768	396	582	528
18	972	906	1170	1110	965	869	1280	1240	738	402	633	570
19	1050	972	1210	1170	989	962	1300	1290	402	255	681	624
20	1080	1050	1210	1160	962	893	1350	1280	258	222	684	633
21	1080	1070	1160	1020	893	833	1400	1350	276	237	726	645
22	1230	1080	1180	1020	878	836	1430	1380	300	264	744	651
23	1300	1230	1190	1160	923	878	1470	1430	309	255	717	666
24	1320	1310	1230	1190	980	923	1480	1440	288	258	732	714
25	1330	1310	1220	1160	980	881	1450	1410	390	288	843	723
26	1350	1330	1210	1180	893	834	1480	1440	456	390	813	759
27	1340	1310	1180	1080	938	893	1510	1460	555	456	879	780
28	1310	1240	1140	921	1000	920	1570	1510	522	504	873	801
29	1240	1190	927	840	1090	992	1540	1520	---	---	960	870
30	1280	1210	939	810	1110	1050	1660	1540	---	---	1020	939
31	1340	1280	---	---	1140	1060	1850	1650	---	---	942	876
MONTH	1580	900	1380	810	1210	743	1850	905	1170	222	1020	519

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	906	873	1190	1150	807	728	706	613	895	787	1250	1220
2	912	846	1160	1100	831	648	718	691	907	853	1290	1220
3	987	849	1160	1090	648	360	847	691	865	844	1280	1160
4	993	951	1150	1120	420	357	925	844	895	865	1310	1230
5	1030	984	1200	1120	534	393	1000	910	895	790	1260	1140
6	1030	954	1090	623	657	534	1000	943	985	856	1250	1030
7	1070	966	715	640	714	657	1060	943	1030	985	1030	792
8	1070	1030	646	574	762	714	1150	1060	1030	979	792	633
9	1030	984	591	546	762	714	1090	1000	1080	979	744	666
10	1020	990	626	557	804	753	1360	1000	1160	1080	735	681
11	1050	990	686	623	804	759	1390	712	1180	1130	693	666
12	1090	1040	701	638	855	804	1140	532	1400	1160	771	690
13	1080	1040	758	689	957	855	532	358	1350	1080	918	771
14	1080	1040	750	705	990	954	634	421	1080	997	960	909
15	1120	1020	769	706	1320	927	436	391	997	889	1020	960
16	1020	946	772	754	1240	729	541	436	913	871	1130	1020
17	995	944	857	761	738	705	703	541	1000	868	1180	1110
18	974	887	913	832	723	690	946	703	1080	1000	1220	1180
19	1020	960	852	804	738	681	1020	946	1160	1080	1250	1210
20	1120	1000	836	797	849	708	970	910	1220	1130	1260	1190
21	1100	1060	884	782	885	840	953	910	1230	1200	1410	738
22	1100	1040	922	868	882	846	985	955	1300	1220	771	642
23	1110	1080	913	892	1020	879	958	838	1350	1300	642	588
24	1120	1050	930	780	1030	1010	901	829	---	---	618	594
25	1080	1040	844	442	1040	970	1170	571	1230	1190	711	619
26	1140	1070	449	365	1200	532	661	565	1230	1200	843	711
27	1090	978	486	402	532	385	598	532	1230	1210	1040	963
28	1030	989	607	478	463	385	661	535	1490	1210	846	690
29	1130	1010	676	601	565	463	679	661	1550	1490	699	648
30	1240	1130	686	665	613	562	751	661	1510	1420	648	639
31	---	---	728	680	---	---	787	751	1420	1250	---	---
MONTH	1240	846	1200	365	1320	357	1390	358	1550	787	1410	588
YEAR	1850	222										

04188200 AUGLAIZE RIVER AT CLOVERDALE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	8.0	7.8	7.6	7.5	6.6	6.5	8.4	8.1	---	---	7.2	7.1
2	8.0	7.9	7.7	7.4	---	---	8.2	7.8	---	---	7.2	7.1
3	8.0	7.9	7.7	7.5	---	---	7.8	7.6	---	---	7.2	7.1
4	8.0	7.8	7.6	7.5	---	---	7.6	7.1	---	---	7.2	7.0
5	8.0	7.8	7.6	7.4	---	---	7.8	7.0	---	---	7.2	7.1
6	7.9	7.8	7.6	7.5	---	---	---	---	8.5	8.0	7.2	7.2
7	7.9	7.8	7.6	7.5	---	---	---	---	8.6	8.5	7.2	7.1
8	7.9	7.6	7.6	7.4	8.2	7.8	---	---	8.6	8.4	7.2	7.1
9	7.8	7.7	7.5	7.5	8.3	8.1	---	---	8.5	8.0	7.2	7.2
10	7.8	7.6	7.5	7.4	8.3	8.1	---	---	8.5	8.4	7.2	7.1
11	7.8	7.7	7.5	7.4	8.1	8.0	8.3	7.8	8.5	7.2	7.2	7.0
12	7.8	7.5	7.5	7.4	8.2	8.0	8.3	7.9	7.3	7.2	7.2	7.0
13	7.7	7.6	7.4	7.3	8.3	8.2	8.3	8.1	7.2	7.1	7.2	7.0
14	7.6	7.4	7.4	7.3	8.3	8.2	8.2	8.0	7.2	7.0	7.3	7.1
15	7.7	7.3	7.3	7.2	8.3	8.2	8.3	8.2	7.1	7.1	7.2	6.9
16	7.7	7.4	7.4	7.0	8.3	8.2	8.4	8.2	7.2	7.1	7.3	7.2
17	7.7	7.3	7.7	7.4	8.3	8.2	8.4	8.3	7.3	6.9	7.3	7.2
18	7.7	7.5	7.7	7.6	8.3	8.2	8.5	8.4	7.4	7.3	7.7	7.3
19	7.6	7.4	7.8	7.6	8.3	8.2	8.5	8.4	7.4	7.3	7.8	7.6
20	7.5	7.5	7.7	7.5	8.2	8.1	8.6	8.5	7.4	7.3	7.9	7.8
21	7.5	7.4	7.7	7.5	8.2	8.1	8.6	8.5	7.4	7.3	7.9	7.8
22	7.6	7.3	7.7	7.1	8.2	8.1	8.6	8.5	7.5	7.3	7.8	7.5
23	7.6	7.4	7.5	6.5	8.3	8.1	8.6	8.4	7.5	7.1	7.5	7.3
24	7.6	7.4	7.4	7.3	8.2	8.1	8.6	8.5	7.3	7.1	7.4	7.2
25	7.5	7.3	7.4	7.3	8.2	8.0	8.6	8.5	7.3	7.1	7.2	7.0
26	7.4	7.3	7.2	6.5	8.2	8.1	8.5	8.5	7.2	7.1	7.1	6.9
27	7.4	7.3	7.2	6.8	8.4	8.1	8.5	8.4	7.2	7.1	7.0	6.8
28	7.4	7.4	6.7	6.6	8.3	8.2	8.4	8.3	7.2	7.1	6.9	6.7
29	7.5	7.0	6.6	6.5	8.3	8.1	8.5	8.4	---	---	7.0	6.7
30	7.6	7.5	6.6	6.5	8.4	8.1	8.5	8.4	---	---	7.2	6.9
31	7.6	7.5	---	---	8.5	8.4	8.4	8.1	---	---	9.0	6.7
MONTH	8.0	7.0	7.8	6.5	8.5	6.5	8.6	7.0	8.6	6.9	9.0	6.7

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	7.2	6.6	8.6	8.0	8.1	7.7	8.3	7.8	---	---	---	---
2	7.4	7.2	8.2	7.9	8.1	7.7	8.3	7.7	---	---	---	---
3	7.3	7.1	9.0	8.1	8.1	7.3	8.4	7.9	---	---	---	---
4	7.2	7.0	8.7	8.2	8.0	7.4	8.3	7.9	---	---	---	---
5	7.2	7.0	8.7	8.4	7.8	7.3	8.3	7.7	---	---	---	---
6	7.2	6.9	9.6	8.6	8.0	7.3	8.3	7.9	---	---	---	---
7	7.4	7.1	10.0	9.1	7.9	7.7	8.3	7.8	---	---	7.4	6.8
8	7.4	7.0	9.6	8.3	7.9	7.6	---	---	---	---	7.4	6.9
9	7.2	6.9	9.4	8.2	8.0	7.4	---	---	---	---	7.0	6.9
10	7.1	6.9	9.8	8.4	8.0	6.0	---	---	---	---	7.3	6.9
11	7.4	6.9	8.9	8.3	7.6	7.4	---	---	---	---	7.2	6.8
12	7.5	7.3	8.8	8.6	7.8	7.6	---	---	---	---	7.0	6.6
13	7.8	7.3	8.8	8.4	8.2	6.7	---	---	---	---	6.9	6.8
14	7.9	7.4	8.6	8.2	7.7	6.4	---	---	---	---	8.0	6.8
15	8.7	7.6	8.8	8.2	7.9	7.5	---	---	---	---	7.6	7.6
16	8.8	7.7	8.9	8.3	8.2	7.2	---	---	---	---	7.4	5.7
17	8.5	8.0	8.9	8.3	8.0	6.9	---	---	---	---	7.3	6.7
18	8.5	8.1	8.8	8.6	8.1	6.8	---	---	---	---	6.8	6.3
19	8.5	7.6	8.7	8.5	8.7	7.3	---	---	---	---	6.8	6.0
20	8.2	7.6	8.7	8.1	8.6	7.9	---	---	---	---	6.3	5.5
21	8.0	7.9	8.6	8.2	8.0	7.3	---	---	---	---	---	---
22	8.1	7.7	8.6	8.4	7.7	6.8	---	---	---	---	---	---
23	8.1	7.7	8.6	8.2	7.7	6.7	---	---	---	---	---	---
24	8.0	7.9	8.6	8.2	8.4	7.6	---	---	---	---	---	---
25	8.1	7.7	8.5	7.7	8.4	8.0	---	---	---	---	---	---
26	8.1	7.6	8.5	8.0	8.4	7.8	---	---	---	---	---	---
27	8.2	8.0	8.6	7.1	8.6	8.3	---	---	---	---	---	---
28	8.3	8.1	8.7	8.0	8.4	7.5	---	---	---	---	---	---
29	8.3	8.1	8.9	7.6	8.1	7.6	---	---	---	---	8.8	7.4
30	8.3	8.0	8.6	7.9	8.0	7.3	---	---	---	---	8.8	8.5
31	---	---	8.7	8.0	---	---	---	---	---	---	---	---
MONTH	8.8	6.6	10.0	7.1	8.7	6.0	---	---	---	---	---	---

04188200 AUGLAIZE RIVER AT CLOVERDALE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.7	3.2	---	---	---	---	---	---	---	---	---	---
2	3.3	2.0	---	---	---	---	---	---	---	---	---	---
3	4.7	2.3	---	---	---	---	---	---	---	---	---	---
4	4.7	3.5	---	---	---	---	---	---	---	---	---	---
5	4.4	3.0	---	---	---	---	---	---	---	---	---	---
6	4.3	2.7	---	---	---	---	---	---	---	---	---	---
7	4.1	2.5	---	---	---	---	---	---	---	---	---	---
8	3.8	1.4	---	---	11.8	9.2	---	---	---	---	---	---
9	2.6	1.4	---	---	11.6	10.5	---	---	---	---	---	---
10	2.5	0.6	---	---	11.6	10.0	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	10.6	9.7
19	---	---	---	---	---	---	---	---	---	---	9.8	9.6
20	---	---	---	---	---	---	---	---	---	---	10.2	9.9
21	---	---	---	---	---	---	---	---	---	---	10.5	9.7
22	---	---	---	---	---	---	---	---	---	---	9.9	8.1
23	---	---	---	---	---	---	---	---	---	---	8.9	8.2
24	---	---	---	---	---	---	---	---	---	---	9.5	8.8
25	---	---	---	---	---	---	---	---	---	---	9.8	8.9
26	---	---	---	---	---	---	---	---	---	---	9.6	8.6
27	---	---	---	---	---	---	---	---	---	---	9.0	8.1
28	---	---	---	---	---	---	---	---	---	---	8.7	7.6
29	---	---	---	---	---	---	---	---	---	---	8.2	7.1
30	---	---	---	---	---	---	---	---	---	---	8.5	7.3
31	---	---	---	---	---	---	---	---	---	---	8.9	7.4
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	6.6	---	---	3.9	3.2	2.7	1.9	2.7	2.2	4.5	2.1
2	8.5	6.7	---	---	4.0	3.0	2.8	2.2	2.9	1.8	3.0	1.0
3	9.2	7.4	---	---	4.6	3.6	3.1	2.4	8.9	1.7	4.7	1.7
4	9.5	8.3	---	---	4.7	4.4	3.1	2.3	5.8	1.7	3.3	1.6
5	9.8	8.4	---	---	4.7	3.2	4.5	2.1	6.9	2.2	---	---
6	9.8	8.5	---	---	3.2	2.3	5.5	2.7	4.9	2.1	---	---
7	9.5	8.2	---	---	2.4	2.0	4.6	2.8	4.4	1.6	3.3	2.5
8	9.5	7.9	---	---	2.2	1.9	2.8	1.4	---	---	2.8	2.4
9	9.7	8.0	---	---	2.2	2.0	3.6	1.0	---	---	2.6	2.0
10	10.1	7.8	---	---	2.4	1.9	5.3	1.4	---	---	2.4	1.9
11	9.9	7.7	5.6	5.1	2.4	1.8	2.1	1.1	---	---	2.9	1.9
12	9.9	7.5	5.7	5.0	2.2	1.6	7.9	1.6	---	---	3.5	2.3
13	7.8	6.1	6.1	5.2	2.4	1.1	3.1	2.2	---	---	3.8	2.6
14	7.7	6.8	5.7	4.1	3.3	1.0	3.5	2.0	---	---	4.0	2.8
15	11.2	6.6	4.2	2.9	3.7	1.3	7.0	2.0	---	---	4.1	2.6
16	9.5	6.6	3.4	2.4	3.9	1.0	2.6	1.8	---	---	4.7	2.9
17	8.4	5.7	4.2	2.0	8.1	0.5	2.3	1.8	---	---	5.0	3.0
18	7.1	4.4	4.1	2.1	9.2	5.7	2.8	1.9	---	---	5.6	3.1
19	6.3	3.6	4.0	1.8	7.5	5.3	2.7	1.3	---	---	5.6	3.2
20	5.8	3.4	7.0	1.4	[illegible]	1.4	5.0	1.9	---	---	5.2	3.3
21	4.5	3.2	7.5	5.2	1.9	0.5	6.9	2.4	---	---	4.2	3.3
22	5.5	3.4	7.0	4.0	1.0	0.4	6.2	2.3	---	---	4.1	3.4
23	5.4	3.7	6.9	4.2	3.0	0.7	8.3	2.2	---	---	3.4	3.0
24	5.7	3.6	6.6	4.1	4.5	1.6	7.7	4.5	---	---	3.3	3.0
25	5.5	3.7	5.4	3.8	7.5	1.6	6.5	1.3	10.5	5.8	3.2	2.9
26	6.6	3.0	6.8	5.2	5.3	0.9	4.3	1.3	8.6	4.6	3.5	3.1
27	---	---	7.3	6.6	2.6	1.3	3.0	1.3	8.8	3.8	3.7	2.7
28	---	---	8.8	6.0	7.5	2.1	3.5	1.3	9.4	5.2	3.7	2.5
29	---	---	8.9	4.5	2.4	1.9	4.3	3.2	9.5	5.0	2.7	2.0
30	---	---	5.3	4.5	2.0	1.8	3.9	3.2	8.7	4.6	2.1	1.4
31	---	---	5.0	3.5	---	---	3.1	2.4	6.8	3.2	---	---
MONTH	11.2	3.0	---	---	9.2	0.4	8.3	1.0	---	---	5.6	1.0

04188200 AUGLAIZE RIVER AT CLOVERDALE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	15.5	13.0	12.0	9.0	9.0	1.0	0.5	---	---	5.5	4.5
2	17.5	15.0	12.0	11.0	---	---	1.0	0.5	---	---	5.5	5.0
3	17.5	15.0	11.5	10.5	---	---	1.5	0.5	---	---	5.5	4.0
4	16.0	13.5	11.0	10.0	---	---	1.0	0.5	---	---	4.0	2.5
5	16.5	14.0	10.5	9.5	---	---	1.5	0.0	---	---	3.0	1.5
6	17.5	14.5	11.0	9.0	---	---	---	---	0.5	0.0	3.5	3.0
7	18.5	16.0	11.0	9.0	---	---	---	---	0.5	0.0	4.0	2.5
8	18.5	16.5	10.5	9.0	3.0	2.0	---	---	1.0	0.0	2.5	1.0
9	19.5	17.5	11.0	9.5	3.5	2.0	---	---	1.5	0.5	2.0	0.0
10	18.5	16.0	11.5	10.5	4.0	3.0	---	---	1.0	0.0	2.5	1.5
11	17.0	15.0	11.5	10.5	4.0	3.5	1.0	0.5	0.5	0.0	3.0	2.0
12	16.5	15.5	11.5	11.0	4.0	3.5	1.5	0.5	0.5	0.0	4.0	2.5
13	17.0	16.0	11.0	10.0	4.0	3.5	1.5	0.5	1.0	0.0	4.5	4.0
14	18.0	17.0	10.0	7.5	4.0	3.0	1.0	0.5	1.0	0.0	6.5	4.0
15	18.0	15.5	8.0	6.0	3.0	1.5	1.0	0.5	0.5	0.0	8.5	6.5
16	15.5	13.0	7.0	5.5	2.0	1.5	1.0	0.0	0.0	0.0	7.5	5.5
17	13.0	12.0	6.0	5.0	2.5	1.5	1.0	0.0	0.5	0.0	5.5	4.5
18	12.5	11.0	6.5	5.0	2.5	2.0	1.0	0.5	0.0	0.0	4.5	4.0
19	12.5	11.0	7.5	5.5	4.5	2.5	2.0	0.5	0.0	0.0	4.5	4.0
20	12.5	12.5	8.0	7.0	4.0	2.5	1.0	0.5	0.5	0.0	4.0	3.5
21	13.5	12.5	8.0	6.5	3.0	2.5	1.0	0.5	0.5	0.0	4.5	3.0
22	14.0	12.5	8.0	5.5	2.5	2.0	0.5	0.0	0.5	0.0	5.0	4.5
23	14.0	13.0	5.5	1.5	3.5	2.0	1.0	0.0	0.5	0.0	5.0	3.0
24	14.5	13.0	3.5	1.5	2.5	0.5	0.5	0.0	0.5	0.0	3.5	1.5
25	15.0	13.0	3.5	2.0	1.5	0.5	0.5	0.0	2.5	0.0	4.5	2.5
26	15.5	13.5	4.0	2.0	1.5	0.5	1.5	0.5	4.5	2.0	5.5	3.5
27	16.0	14.0	6.5	3.5	1.5	1.0	1.5	1.0	6.0	4.5	5.5	4.5
28	16.0	15.0	6.5	5.5	1.0	0.5	1.0	0.5	5.5	4.5	8.0	5.5
29	15.0	14.0	8.0	6.5	1.0	0.5	1.0	0.0	---	---	8.0	6.5
30	14.5	13.0	9.0	9.0	1.0	0.5	1.0	1.0	---	---	7.5	5.0
31	14.0	12.5	---	---	1.0	0.5	1.5	1.0	---	---	9.0	6.5
MONTH	19.5	11.0	13.0	1.5	9.0	0.5	2.0	0.0	6.0	0.0	9.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.5	19.0	13.5	21.5	20.5	27.5	26.5	22.5	20.0	23.0	20.5
2	8.5	7.5	16.0	14.0	20.5	18.5	27.0	25.5	24.0	21.0	22.5	21.0
3	7.5	6.0	20.5	13.5	20.0	18.5	25.5	24.0	24.0	22.5	23.0	21.0
4	7.0	5.0	18.0	12.5	21.0	19.5	25.5	24.5	22.5	20.0	23.5	21.5
5	7.0	6.0	14.5	12.5	23.0	21.0	25.5	24.5	21.5	20.0	24.5	21.5
6	7.0	5.0	18.5	13.5	23.5	22.5	26.0	23.5	23.5	19.5	24.5	22.0
7	8.0	5.5	19.0	17.0	24.0	22.5	27.0	24.5	24.0	20.0	23.5	22.0
8	10.0	7.5	23.5	17.0	23.5	22.0	27.0	25.0	25.0	21.0	24.0	22.0
9	12.5	9.5	22.0	17.5	22.0	20.5	27.0	25.5	26.0	21.0	24.5	23.0
10	12.0	9.5	20.5	17.0	21.5	20.0	26.5	25.0	29.0	23.0	25.0	24.0
11	13.0	10.0	21.0	17.0	22.0	20.5	25.5	23.0	29.5	23.5	24.5	23.5
12	15.5	11.5	17.0	16.0	23.5	21.0	24.5	23.0	25.0	22.0	23.5	22.0
13	15.5	13.0	16.0	15.5	25.0	23.0	24.0	22.5	24.5	17.0	22.5	20.5
14	13.0	12.0	17.5	15.5	25.5	24.0	24.5	23.0	26.0	19.0	23.0	20.0
15	13.5	12.0	19.0	17.0	26.0	24.5	24.0	23.0	24.0	21.0	23.0	21.5
16	14.0	12.0	20.5	19.0	25.0	23.5	24.5	23.0	24.5	21.0	22.5	20.5
17	16.0	14.0	22.0	19.5	25.0	23.5	24.5	23.0	24.5	21.0	21.5	19.5
18	17.5	15.5	23.5	21.5	25.5	24.5	24.0	23.0	25.0	21.0	21.0	15.0
19	17.0	15.5	23.5	22.5	27.0	25.0	25.0	21.0	25.5	20.5	20.5	18.5
20	18.0	15.0	22.5	19.5	28.5	25.5	23.5	22.0	26.0	22.0	20.5	18.5
21	16.5	14.0	21.5	20.0	28.0	26.0	24.5	21.5	26.5	23.0	19.5	16.0
22	15.0	13.0	21.5	19.5	27.0	25.5	25.5	22.0	27.0	23.0	18.5	14.5
23	15.5	13.0	20.5	19.0	28.0	25.0	26.0	23.0	27.5	22.5	18.5	16.0
24	15.5	12.5	21.5	20.0	27.5	25.0	25.0	23.0	---	---	18.5	15.5
25	15.5	12.0	20.5	17.0	27.5	25.5	24.0	22.0	25.0	21.5	18.0	16.0
26	16.0	13.0	17.0	15.0	26.5	22.5	24.5	22.5	24.5	20.5	16.5	14.5
27	14.0	13.0	15.0	13.5	23.5	22.0	23.5	21.0	22.5	19.0	19.0	15.5
28	13.5	12.0	16.0	14.0	26.5	24.0	22.5	20.5	21.5	20.0	20.5	17.0
29	13.0	11.5	17.5	16.0	26.5	26.0	22.5	21.5	23.0	19.5	22.0	20.5
30	16.0	11.5	19.0	17.0	28.0	26.5	22.0	21.0	24.0	20.0	22.5	20.5
31	---	---	21.0	19.0	---	---	21.0	20.0	25.0	21.0	---	---
MONTH	18.0	5.0	23.5	12.5	28.5	18.5	27.5	20.0	29.5	17.0	25.0	14.5
YEAR	29.5	0.0										

04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO

LOCATION.--Lat 41°03'21", long 83°41'17", on east line of sec.10, T.1 N., R.10 E., Hancock County, at gaging station on left bank at upstream side of county road bridge, 2 miles west of Findlay, 3 miles downstream from Eagle Creek, and 3 miles upstream from Aurand Run.

DRAINAGE AREA.--346 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1971.
Water temperatures: July 1968 to September 1971.
Sediment records: Water years 1970-71 (partial-record station).

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,490 micromhos Feb. 4; minimum, 243 micromhos Feb. 20.
pH: Maximum, 9.1 June 20; minimum, 5.9 Aug. 11.
Dissolved oxygen: Maximum, 13.2 mg/l Apr. 25; minimum, 1.1 mg/l Aug. 28.
Water temperatures: Maximum, 31.0°C June 28; minimum, freezing point Dec. 26, Jan. 28.

Period of record:
Specific conductance (1969-71): Maximum, 1,500 micromhos or greater Jan. 26, 1970; minimum, 240 micromhos Apr. 26, May 12, 1970.
pH (1969-71): Maximum, 9.1 June 20, 1971; minimum, 3.1 May 13, 1970.
Dissolved oxygen (1969-71): Maximum, 14.4 mg/l Feb. 26, 1970; minimum, 0.0 mg/l June 18, July 2, 3, 1970.
Water temperatures (1969-71): Maximum, 31.0°C June 28, 1971; minimum, freezing point on several days during 1970 and 1971.

REMARKS.--Continuous water-quality recorder operated since July 1968. Maximum recorded pH of 9.3 occurred Sept. 17, 1968. Maximum recorded dissolved oxygen concentrations of 14.9 mg/l occurred Jan. 21, 1969. Maximum recorded water temperatures of 33.0°C occurred Aug. 27, 28, Sept. 5, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected three times during the year to further define the quality of water. Sediment data for this station on page 401.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)
OCT.												
06...	1740	20	--	--	--	--	--	--	--	--	--	--
29...	1335	18	176	0	210	52	2.8	63	630	300	160	986
NOV.												
08...	0920	14	198	6	210	54	2.4	38	634	320	150	964
29...	0900	26	212	0	170	48	1.0	28	548	330	160	836
DEC.												
10...	1330	19	208	0	240	59	1.9	45	694	340	210	1030
14...	1500	280	150	0	140	34	.6	45	452	290	170	676
JAN.												
07...	0930	60	208	0	180	47	1.0	41	546	330	160	830
22...	1320	23	318	0	220	130	1.7	1.9	780	410	150	1310
FEB.												
04...	1400	80	326	0	210	69	1.8	10	704	400	130	1130
21...	0910	2130	62	0	36	12	.3	16	164	99	48	251
MAR.												
14...	0855	1260	120	0	80	23	.3	49	336	220	120	496
31...	1205	88	200	0	150	36	.6	40	492	340	180	770
APR.												
08...	0655	77	210	0	180	41	.7	26	558	360	190	826
14...	1615	81	188	0	170	41	.6	14	500	330	180	767
MAY												
02...	0845	40	182	0	190	48	1.0	32	574	330	180	848
07...	1150	1630	104	0	75	25	.4	74	396	240	160	520
JUNE												
03...	2040	298	200	0	120	28	.4	52	470	330	160	689
18...	0635	49	196	7	180	38	.8	27	556	350	180	810
JULY												
11...	0850	83	105	0	95	25	.4	21	296	190	54	480
29...	0810	20	189	0	190	52	.7	23	568	310	150	889
AUG.												
14...	0730	11	140	0	180	47	1.1	23	494	260	140	771
26...	1815	25	103	0	250	53	1.8	74	638	240	160	954
SEP.												
19...	1050	8.2	100	0	240	64	2.0	75	664	240	160	971
28...	1320	14	120	0	130	37	.9	21	390	210	110	615

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.								
06...	14	0	0	1	0	1	.7	40
MAY								
20...	13	--	--	--	--	--	6.9	--
JULY								
28...	--	--	--	--	--	--	1.3	--

04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	889	851	914	874	919	846	909	892	1150	1100	570	499
2	889	858	888	852	923	903	934	909	1150	1100	625	562
3	891	831	871	806	919	901	941	919	1150	1100	655	623
4	876	607	916	861	918	879	929	794	1490	934	759	651
5	878	811	955	912	930	912	907	853	990	343	783	722
6	852	816	973	933	954	930	863	803	384	336	774	699
7	894	843	942	927	968	951	848	807	465	384	706	620
8	899	846	942	901	979	952	879	843	534	448	657	607
9	872	827	902	879	990	959	903	844	631	534	663	649
10	856	823	897	861	973	954	915	844	696	630	791	653
11	849	746	871	828	950	819	917	887	780	676	745	700
12	752	734	891	867	819	628	933	909	1090	772	741	692
13	757	515	918	879	757	640	946	916	833	765	692	517
14	706	531	921	869	765	670	1030	946	793	639	517	492
15	691	622	882	790	756	689	965	925	663	630	509	497
16	779	710	867	792	800	755	992	922	711	630	560	497
17	825	789	894	834	743	704	1000	961	797	408	603	559
18	827	780	914	889	779	733	1130	1000	408	247	659	603
19	853	776	941	891	816	780	1100	1060	259	244	681	659
20	873	832	939	756	808	776	1080	1070	257	243	668	612
21	894	731	838	759	821	788	1090	1060	318	256	627	610
22	838	739	867	838	863	814	1320	1070	371	287	660	624
23	860	815	936	867	819	807	1330	1150	322	270	691	660
24	902	839	955	933	817	781	1220	1100	364	322	720	688
25	921	852	950	933	791	758	1120	1090	479	364	742	713
26	891	861	999	930	787	748	1150	1090	476	443	762	738
27	909	874	986	912	805	769	1120	1060	450	439	765	742
28	955	895	914	759	890	806	1060	1040	499	448	763	724
29	981	902	847	646	899	836	1050	1030	---	---	771	738
30	946	734	855	741	910	869	1070	1010	---	---	799	756
31	874	736	---	---	898	879	1150	1070	---	---	799	758
MONTH	981	515	999	646	990	628	1330	794	1490	243	799	492

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	801	767	804	756	765	676	815	769	---	---	858	810
2	813	750	807	750	775	660	778	761	856	817	960	858
3	794	771	786	713	714	697	824	778	840	826	983	960
4	801	773	861	743	699	676	829	807	850	835	966	912
5	815	791	885	848	709	699	831	802	889	850	960	906
6	828	807	870	555	702	653	843	798	932	882	906	815
7	824	786	617	557	666	645	849	820	909	888	815	749
8	832	800	633	611	687	635	870	843	914	888	776	716
9	817	782	649	627	726	681	905	864	898	883	816	774
10	811	778	687	643	739	712	903	815	884	835	848	800
11	803	767	738	687	747	703	815	497	8[illegible]3	654	875	848
12	800	770	774	717	763	727	753	644	822	689	899	819
13	817	781	776	741	748	694	815	753	932	822	819	783
14	797	742	762	734	703	669	876	815	954	921	905	764
15	813	796	761	732	714	676	866	823	961	930	932	891
16	819	805	754	708	727	675	878	853	960	894	972	932
17	825	796	734	709	738	671	893	865	894	834	971	941
18	822	771	768	723	739	680	902	848	856	838	971	942
19	808	774	772	711	761	689	857	794	876	855	965	938
20	808	766	747	676	744	689	850	751	930	870	947	581
21	811	771	752	711	762	601	832	769	930	878	668	564
22	819	777	730	707	831	736	859	823	883	842	806	668
23	817	787	---	---	867	821	882	856	882	853	864	806
24	826	774	766	645	863	819	904	631	890	824	890	833
25	841	715	645	376	840	810	737	689	897	861	882	836
26	790	712	527	429	837	809	760	704	977	888	864	803
27	761	728	591	527	846	762	768	709	954	794	803	654
28	794	742	640	591	785	740	873	704	816	707	681	615
29	788	757	667	627	839	748	918	861	890	816	814	679
30	821	757	676	655	794	727	912	876	891	837	849	778
31	---	---	690	648	---	---	909	792	837	806	---	---
MONTH	841	712	885	376	867	601	918	497	977	654	983	564
YEAR	1490	243										

04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.3	7.2	7.5	7.3	7.7	7.5	7.7	7.5	7.7	7.6	7.8	7.7
2	7.5	7.3	7.5	7.2	7.6	7.5	7.7	7.6	7.7	7.6	7.9	7.8
3	7.4	7.2	7.4	7.2	7.5	7.4	7.7	7.6	7.6	7.5	8.0	7.8
4	7.6	7.4	7.5	7.2	7.6	7.5	7.8	7.6	7.7	7.2	8.1	7.7
5	7.9	7.5	7.5	7.2	7.6	7.5	7.8	7.7	8.2	7.5	7.7	7.6
6	7.7	7.3	7.5	7.2	7.8	7.6	7.7	7.6	7.5	7.4	7.7	7.5
7	7.7	7.3	7.5	7.3	7.7	7.6	7.7	7.5	7.7	7.3	7.7	7.6
8	7.5	7.4	7.5	7.3	7.7	7.5	7.7	7.5	7.5	7.3	7.8	7.6
9	7.4	7.2	7.5	7.4	7.6	7.6	7.6	7.5	7.3	7.2	7.7	7.6
10	7.3	7.2	7.4	7.2	7.6	7.5	7.6	7.5	7.4	7.3	7.7	7.6
11	7.4	7.1	7.3	7.2	7.6	7.4	7.7	7.5	7.4	7.3	7.7	7.6
12	7.3	7.2	7.3	7.3	7.7	7.5	7.7	7.5	7.4	7.3	7.9	7.6
13	7.2	6.9	7.4	7.3	7.7	7.5	7.8	7.2	7.6	7.3	7.8	7.5
14	7.5	7.1	7.6	7.3	7.7	7.6	7.6	7.5	7.6	7.3	7.6	7.5
15	7.5	7.3	7.6	7.5	7.6	7.5	7.7	7.5	7.5	7.3	7.6	7.5
16	7.6	7.4	7.7	7.4	7.6	7.4	7.8	7.6	7.6	7.3	7.6	7.5
17	7.6	7.3	7.7	7.5	7.6	7.3	7.7	7.6	7.7	7.2	7.6	7.5
18	7.7	7.4	[illegible]	7.5	7.6	7.4	7.7	7.6	7.7	7.6	7.6	7.6
19	7.8	7.6	7.6	7.5	7.7	7.5	7.7	7.6	7.7	7.6	7.7	7.5
20	7.7	7.4	7.6	7.6	7.7	7.6	7.7	7.6	7.9	7.7	7.7	7.6
21	7.6	7.4	7.6	7.5	7.7	7.6	7.7	7.6	7.7	7.6	7.8	7.6
22	7.7	7.4	7.8	7.5	7.7	7.5	7.8	7.5	7.8	7.6	7.7	7.5
23	7.7	7.5	8.1	7.7	7.8	7.5	7.8	7.6	7.8	7.6	7.7	7.6
24	7.7	7.5	8.0	7.8	7.9	7.8	7.7	7.6	7.7	7.6	7.7	7.6
25	7.7	7.5	7.8	7.7	7.9	7.8	7.8	7.6	7.8	7.6	7.7	7.5
26	7.8	7.5	7.7	7.5	7.8	7.6	7.9	7.6	7.8	7.5	7.7	7.6
27	7.8	7.5	7.7	7.5	7.8	7.6	7.9	7.7	7.8	7.6	7.8	7.6
28	7.6	7.5	7.6	7.3	7.7	7.5	7.8	7.6	7.9	7.7	7.8	7.6
29	7.5	7.4	7.6	7.4	7.6	7.4	7.8	7.7	---	---	7.8	7.7
30	7.5	7.1	7.6	7.5	7.6	7.3	7.9	7.7	---	---	7.9	7.6
31	7.3	7.1	---	---	7.7	7.5	7.8	7.7	---	---	7.9	7.6
MONTH	7.9	6.9	8.1	7.2	7.9	7.3	7.9	7.2	8.2	7.2	8.1	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.8	7.6	7.6	7.4	7.6	7.5	7.7	7.5	---	---	7.1	6.4
2	7.8	7.6	7.5	7.4	7.5	7.3	7.8	7.5	8.8	8.1	7.3	6.5
3	7.9	7.6	7.9	7.5	7.6	7.4	7.8	7.5	8.2	7.5	7.6	7.0
4	7.9	7.7	8.2	7.6	7.5	7.3	7.9	7.5	7.5	7.4	7.5	7.0
5	7.9	7.6	7.9	7.5	7.5	7.3	7.7	7.5	7.9	7.5	7.5	7.0
6	7.9	7.6	7.7	7.3	7.7	7.4	7.6	6.0	8.0	7.5	7.5	7.1
7	7.9	7.6	7.4	7.3	7.7	7.5	7.6	7.3	8.0	7.4	7.6	7.1
8	7.9	7.6	7.5	7.4	7.6	7.5	7.5	7.3	8.5	7.5	7.2	6.4
9	7.9	7.5	7.6	7.5	7.6	7.4	7.3	7.0	9.0	7.5	7.0	6.3
10	7.9	7.6	7.6	7.6	7.8	7.5	7.2	6.9	8.3	6.9	7.0	6.5
11	8.1	7.6	7.6	7.5	7.8	7.5	6.9	6.5	7.5	5.9	7.2	6.5
12	8.0	7.6	7.6	7.4	7.8	7.5	6.9	6.6	7.2	6.0	6.7	6.3
13	7.7	7.3	7.6	7.5	7.9	7.5	6.9	6.7	7.3	6.2	6.8	6.2
14	7.7	7.3	7.6	7.6	7.9	7.5	7.4	6.8	7.8	6.3	7.1	6.4
15	7.8	7.4	7.7	7.5	7.9	7.4	8.0	7.1	7.0	6.5	6.9	6.2
16	7.9	7.5	7.9	7.5	7.6	7.4	8.1	7.5	6.7	6.4	---	---
17	8.1	7.6	7.9	7.5	7.8	7.3	7.8	7.2	6.9	6.3	---	---
18	8.4	7.7	8.4	7.6	7.5	7.2	7.6	7.3	6.9	6.5	---	---
19	8.2	7.7	8.0	7.3	8.8	7.1	7.6	7.1	7.1	6.7	---	---
20	8.1	7.5	8.1	7.3	9.1	7.2	7.1	6.7	7.5	6.9	---	---
21	7.9	7.6	8.2	7.5	7.9	7.0	7.1	6.7	7.6	6.9	7.3	7.1
22	7.8	7.5	8.0	7.3	8.3	7.9	7.2	6.9	7.9	6.9	7.3	7.2
23	7.8	7.5	---	---	7.9	7.5	7.5	7.2	7.9	7.2	7.2	7.0
24	8.0	7.5	7.8	7.3	7.8	7.5	7.5	6.8	8.4	7.4	7.3	7.1
25	8.3	7.5	7.5	7.2	7.7	7.5	7.7	6.9	7.6	6.9	7.2	7.0
26	8.2	7.4	7.3	7.2	7.8	7.5	7.7	7.3	7.4	6.6	7.1	6.9
27	7.9	7.5	7.4	7.3	7.9	7.6	7.4	6.9	6.8	6.5	7.4	7.0
28	7.7	7.4	7.4	7.3	8.0	7.8	8.0	7.0	6.8	6.5	7.3	7.2
29	7.7	7.5	7.4	7.4	7.8	7.6	7.3	6.6	6.6	6.4	7.3	7.2
30	7.8	7.4	7.6	7.4	7.9	7.5	8.1	6.5	6.5	6.3	7.3	7.1
31	---	---	7.7	7.5	---	---	7.9	7.4	6.5	6.2	---	---
MONTH	8.4	7.3	8.4	7.2	9.1	7.0	8.1	6.0	9.0	5.9	7.6	6.2
YEAR	9.1	5.9										

04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.4	3.6	5.1	3.2	8.3	7.4	10.2	9.4	8.2	7.0	9.0	8.3
2	5.0	3.7	5.3	3.9	7.7	6.9	10.2	9.2	7.8	6.1	9.0	8.5
3	5.8	3.5	4.7	3.1	7.0	6.6	10.0	9.1	6.4	4.7	9.5	9.0
4	6.6	5.0	6.0	4.3	8.2	6.7	10.8	7.4	8.3	4.3	9.8	8.4
5	7.0	5.0	6.3	3.4	8.4	7.0	11.7	10.8	11.6	8.2	9.3	8.4
6	6.7	4.2	6.6	4.7	9.8	8.4	11.4	10.7	10.4	9.7	8.8	7.9
7	7.0	3.8	6.2	4.6	9.4	8.1	11.3	10.9	10.3	9.4	9.9	8.6
8	6.3	3.8	6.3	5.0	8.9	7.9	10.8	9.8	9.7	8.8	10.4	9.9
9	5.2	3.3	6.9	4.4	8.3	7.7	10.3	8.9	9.1	8.2	10.6	10.1
10	4.7	2.8	5.0	3.6	7.9	7.3	10.5	8.8	9.0	8.1	10.7	10.3
11	4.7	3.2	4.7	3.2	7.7	6.6	9.9	8.9	8.9	7.6	10.9	10.4
12	4.3	3.0	4.3	3.4	10.0	6.8	10.1	8.8	8.4	7.4	11.0	10.3
13	3.9	1.7	4.8	3.6	10.9	9.9	9.9	9.0	9.6	8.4	11.0	10.8
14	4.3	2.4	6.5	4.3	11.7	10.9	9.1	7.6	9.7	8.6	11.2	10.7
15	4.4	2.8	6.6	4.5	11.6	10.9	10.8	9.0	9.5	8.6	11.0	10.5
16	5.9	3.9	7.7	4.2	10.9	9.2	11.2	9.7	9.0	7.7	11.6	10.9
17	6.0	4.6	7.6	6.4	10.0	8.9	10.6	9.3	8.6	6.1	12.2	11.6
18	6.3	4.5	6.8	5.4	10.6	9.9	10.5	8.9	8.3	7.2	12.4	10.7
19	7.7	5.2	6.2	5.2	10.1	9.7	10.2	8.8	7.8	7.0	10.7	10.4
20	6.5	4.3	6.5	5.7	10.5	9.8	10.4	8.6	7.5	6.5	11.3	10.6
21	4.6	3.1	7.3	6.0	10.7	10.2	10.0	8.8	7.8	6.8	11.5	10.7
22	5.9	3.4	7.7	5.7	10.3	9.4	8.8	6.7	8.2	6.7	10.8	10.3
23	6.5	4.3	10.3	7.1	11.1	9.9	9.3	6.6	8.0	6.2	11.1	10.3
24	6.7	4.0	10.0	9.2	12.2	11.1	8.5	7.2	8.6	7.4	11.4	10.5
25	6.6	3.9	9.2	8.3	12.2	11.7	8.7	6.6	8.6	7.9	11.3	10.1
26	7.4	3.8	9.0	7.9	11.8	10.9	9.5	6.4	8.4	7.7	10.8	9.9
27	5.6	3.1	7.9	7.1	11.5	10.6	9.6	8.4	8.3	7.8	10.4	9.2
28	5.1	3.0	7.6	5.4	10.8	9.6	9.7	8.1	8.9	8.3	10.0	9.2
29	4.6	3.5	8.6	6.5	10.1	9.3	8.8	7.5	---	---	9.7	9.0
30	4.0	1.6	8.3	7.7	10.3	9.1	9.2	7.4	---	---	10.0	9.0
31	4.6	1.3	---	---	10.3	9.7	9.1	7.7	---	---	10.2	8.2
MONTH	7.7	1.3	10.3	3.1	12.2	6.6	11.7	6.4	11.6	4.3	12.4	7.9

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.8	7.5	11.2	7.3	7.2	5.8	4.8	2.1	---	---	3.4	2.4
2	9.0	7.4	9.2	6.1	6.0	3.7	6.4	1.7	10.0	8.0	4.2	3.0
3	9.9	8.0	11.2	6.0	6.3	5.1	6.6	2.5	8.0	4.1	3.8	2.8
4	10.7	8.6	11.0	6.5	5.6	4.5	6.8	2.2	4.1	3.5	3.5	2.3
5	10.8	8.6	9.7	5.9	4.5	3.7	4.8	2.3	5.5	4.1	4.0	2.5
6	10.9	8.6	7.8	6.3	4.9	3.5	6.9	2.0	5.4	3.9	3.5	2.3
7	10.3	8.4	7.9	7.1	7.0	3.2	6.2	2.4	7.5	3.7	4.0	2.7
8	9.7	7.9	8.0	7.8	5.9	4.4	5.2	2.2	9.2	3.3	4.3	2.5
9	9.2	7.3	7.9	7.7	6.8	4.3	3.9	1.7	10.8	4.9	4.7	2.4
10	9.7	7.0	7.7	6.9	7.4	4.2	3.5	1.4	10.9	7.2	5.1	3.0
11	10.4	7.0	6.9	6.1	8.0	3.7	3.9	2.3	7.2	1.8	3.8	2.6
12	9.7	6.6	6.6	5.5	8.7	4.2	5.3	1.9	7.6	4.0	4.8	2.7
13	7.6	5.3	7.3	6.2	8.4	4.8	6.1	3.1	8.7	4.5	6.4	3.0
14	9.1	5.2	7.0	5.6	10.1	4.8	8.9	3.2	10.4	4.6	5.2	3.4
15	9.4	6.3	5.6	4.3	9.0	3.6	10.5	4.5	8.1	3.9	4.4	3.1
16	10.2	6.9	6.3	4.0	8.9	3.4	10.9	6.6	9.1	4.2	4.1	3.2
17	11.3	6.9	8.2	4.8	8.3	3.9	9.0	4.8	7.0	4.7	5.2	3.5
18	12.9	6.9	8.2	4.4	9.8	2.9	7.8	5.4	8.3	4.1	4.7	4.1
19	11.9	6.8	8.8	3.0	9.2	4.1	7.3	3.3	9.4	4.2	4.7	3.6
20	10.4	6.4	8.4	3.5	8.6	3.9	4.5	1.9	7.6	3.3	5.4	3.6
21	8.9	6.0	7.8	3.4	9.3	3.0	6.1	3.7	7.6	2.8	5.0	3.5
22	10.8	5.8	7.3	3.5	8.8	4.1	7.6	3.4	8.7	2.4	5.4	4.0
23	11.7	6.5	---	---	6.5	3.8	7.5	4.2	8.9	2.8	5.3	3.9
24	12.1	7.0	7.3	3.9	6.3	3.0	5.6	3.0	9.3	6.8	5.1	4.4
25	13.2	7.1	6.9	5.9	5.1	2.5	7.8	2.5	7.7	3.4	4.9	4.1
26	12.9	6.9	8.2	7.4	2.8	1.6	8.3	5.3	4.9	2.4	5.0	3.8
27	11.2	7.4	8.9	8.3	4.2	1.8	8.6	4.5	4.0	1.7	5.3	3.2
28	10.3	6.3	8.7	7.4	6.1	2.3	9.6	4.5	3.3	1.1	5.0	4.1
29	11.8	6.4	7.9	7.2	4.4	2.7	8.5	4.6	6.0	2.2	4.3	3.5
30	12.4	7.1	7.9	6.8	5.4	2.3	7.2	4.4	6.2	2.5	4.1	3.4
31	---	---	8.2	7.2	---	---	5.7	2.7	5.1	2.6	---	---
MONTH	13.2	5.2	11.2	3.0	10.1	1.6	10.9	1.4	10.9	1.1	6.4	2.3
YEAR	13.2	1.1										

04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	16.0	14.0	13.0	10.5	7.0	3.0	1.0	1.0	0.5	5.5	3.5
2	18.0	16.0	13.0	12.0	10.0	8.0	3.0	2.5	1.0	0.5	6.0	4.5
3	18.0	15.5	13.0	11.0	11.0	8.5	3.5	2.5	1.0	0.5	5.0	2.5
4	15.5	13.0	11.5	10.5	10.5	7.0	4.0	2.0	2.0	1.0	4.0	1.0
5	16.5	13.5	10.5	10.0	7.0	4.5	2.0	0.5	1.5	0.5	4.5	2.0
6	19.0	16.0	11.0	10.0	4.0	2.5	2.0	0.5	1.5	0.5	5.0	3.5
7	19.5	17.5	12.0	10.0	4.5	2.5	1.5	0.5	1.0	0.5	4.0	1.5
8	19.5	18.0	12.0	10.5	6.0	4.5	2.5	1.0	1.0	0.5	2.0	1.0
9	20.0	18.5	13.0	11.5	7.5	6.0	3.0	1.0	1.5	0.5	3.0	1.0
10	20.0	16.0	14.0	13.0	7.0	5.5	3.5	2.0	2.0	0.5	3.0	2.0
11	16.5	14.0	13.0	12.5	8.0	6.5	3.5	2.0	3.5	1.0	3.5	2.0
12	18.5	16.0	13.5	12.5	7.5	4.5	3.5	2.5	3.5	1.0	5.0	3.0
13	19.5	18.5	12.5	11.0	4.5	3.5	3.5	2.0	1.5	0.5	4.0	3.0
14	19.5	18.5	11.0	7.0	4.0	3.0	4.5	3.0	1.5	0.5	6.5	3.5
15	19.0	14.5	8.5	7.0	4.0	2.0	2.5	1.5	2.5	1.0	8.0	6.5
16	14.5	12.0	7.0	6.0	5.0	3.0	2.0	1.0	3.5	1.5	6.5	4.0
17	13.5	11.5	8.0	6.0	5.0	4.0	2.0	1.5	3.0	1.0	4.0	3.5
18	14.0	12.0	9.0	7.5	4.0	3.5	2.0	0.5	1.0	1.0	4.0	3.5
19	14.5	12.0	9.0	8.5	5.5	4.0	2.0	0.5	1.0	1.0	4.0	3.5
20	15.0	14.0	10.0	8.0	4.5	3.5	2.5	1.0	1.0	1.0	3.5	3.0
21	15.5	14.5	8.0	6.5	4.0	3.0	2.0	1.5	1.0	1.0	4.5	2.5
22	15.5	14.0	8.5	5.5	5.0	4.0	4.5	2.0	1.0	1.0	5.0	4.5
23	15.5	14.0	5.5	0.5	5.0	2.5	4.5	2.0	1.5	1.0	4.5	3.5
24	16.0	15.0	1.5	0.5	2.5	1.0	3.5	1.5	1.5	1.0	4.5	2.5
25	15.5	14.5	2.5	1.5	1.5	0.5	5.0	3.0	3.5	1.5	6.0	3.0
26	16.0	14.5	4.5	2.5	1.5	0.0	4.5	0.5	5.0	3.5	7.5	3.5
27	17.0	15.5	8.0	4.5	2.0	1.0	0.5	0.5	5.0	4.5	8.0	4.5
28	16.5	15.0	8.5	6.0	2.5	1.0	0.5	0.0	4.5	3.5	9.5	6.0
29	15.0	14.0	8.5	6.0	2.5	2.0	1.0	0.5	---	---	7.5	6.0
30	15.5	14.0	8.0	6.5	2.5	1.5	1.0	0.5	---	---	9.5	5.5
31	15.0	13.5	---	---	3.0	1.5	0.5	0.5	---	---	11.0	6.0
MONTH	20.0	11.5	14.0	0.5	11.0	0.0	5.0	0.0	5.0	0.5	11.0	1.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	8.0	15.5	11.5	20.5	19.0	29.0	26.0	---	---	23.0	21.5
2	9.0	7.0	14.0	11.5	20.0	18.0	27.5	24.5	26.5	24.5	22.5	21.0
3	7.5	6.0	15.5	10.0	20.5	18.5	28.5	23.5	24.5	23.0	23.0	21.5
4	9.5	5.0	15.0	10.5	22.5	19.0	28.0	24.0	23.0	22.5	24.0	22.0
5	8.0	5.5	15.0	12.0	24.5	21.5	26.0	24.0	24.0	23.0	26.5	22.0
6	9.5	4.5	15.0	12.5	25.0	22.5	28.5	23.0	26.0	21.5	24.5	22.5
7	11.5	5.5	12.5	11.5	24.5	22.5	29.0	24.0	27.5	22.0	25.5	22.0
8	13.0	7.0	14.0	11.5	23.0	20.5	27.5	24.5	27.5	23.0	27.0	23.5
9	13.5	9.0	15.0	13.0	22.5	19.0	28.0	25.0	28.5	23.0	26.5	24.0
10	14.0	8.0	16.5	14.0	24.0	18.5	26.5	25.0	28.0	25.5	26.0	22.5
11	15.5	9.0	16.5	15.5	23.0	19.5	25.0	22.5	25.5	23.0	24.0	22.5
12	17.0	11.0	16.0	14.5	24.5	20.5	27.0	22.0	25.0	21.0	22.5	21.0
13	14.5	12.5	16.0	13.0	26.0	21.5	26.5	19.5	26.5	21.5	21.0	19.5
14	15.0	10.5	18.0	13.5	26.0	22.0	26.0	22.5	26.0	22.5	22.5	18.5
15	15.5	10.5	20.0	15.5	26.5	22.5	26.0	22.0	24.5	22.0	22.0	20.5
16	16.0	11.0	21.5	16.5	27.0	22.0	27.0	22.5	25.5	21.0	20.5	19.0
17	16.5	13.5	22.5	17.5	27.5	22.5	26.0	23.0	25.5	20.0	21.0	18.0
18	18.5	13.5	24.0	19.5	28.0	22.5	26.0	22.0	26.5	21.0	20.5	18.0
19	18.5	12.5	24.0	19.5	28.5	24.0	25.5	22.5	26.0	22.0	20.0	18.0
20	20.0	13.5	22.5	19.0	29.0	24.5	24.5	20.0	26.5	23.0	19.5	18.0
21	18.5	14.0	23.5	17.5	28.0	24.5	26.5	22.0	26.5	23.5	18.5	16.0
22	16.0	12.5	22.5	18.0	27.5	22.5	27.5	22.5	27.0	22.5	19.5	17.5
23	17.0	11.0	---	---	27.5	23.0	27.0	23.5	25.5	22.5	19.5	18.0
24	15.5	10.5	21.0	18.5	27.5	24.0	25.5	22.0	25.0	22.5	18.0	16.0
25	16.5	10.5	18.5	14.5	27.5	24.5	26.0	21.5	25.0	21.0	16.5	15.5
26	16.5	11.0	14.5	13.0	26.5	24.0	25.5	23.5	25.0	22.0	18.0	15.5
27	14.5	11.0	14.0	12.5	30.0	25.0	25.0	20.5	23.0	20.5	20.5	18.0
28	13.0	11.5	16.5	13.0	31.0	26.5	24.0	22.0	22.0	20.0	22.5	19.5
29	12.5	10.0	18.0	15.0	29.5	25.5	25.5	22.0	24.5	19.0	23.5	22.0
30	16.0	10.5	19.5	16.0	30.0	27.0	24.5	22.0	26.5	20.5	23.5	22.5
31	---	---	21.5	17.5	---	---	25.0	20.5	25.0	22.5	---	---
MONTH	20.0	4.5	24.0	10.0	31.0	18.0	29.0	19.5	28.5	19.0	27.0	15.5
YEAR	31.0	0.0										

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OHIO

LOCATION.--Lat 41°14'15", long 84°23'57", in NE 1/4 sec.9, T.3 N., R.4 E., Defiance County, 125 ft upstream from gaging station, just above dam at powerplant of Toledo Edison Company, 0.2 mile upstream from Jackson ditch, and 3 miles south of Defiance.

DRAINAGE AREA.--2,318 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1966 to September 1971.
Water temperatures: January 1966 to September 1971.
Sediment records: Water years 1952-63, 1970-71 (partial-record station).

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,140 micromhos Nov. 29; minimum, 206 micromhos Feb. 20.
pH: Maximum, 9.6 Aug. 10; minimum, 6.7 Feb. 11-13.
Dissolved oxygen: Maximum, 15.0 mg/l Apr. 7-17, June 17-19; minimum, 1.0 mg/l June 4, 15.
Water temperatures: Maximum, 29.0°C June 24, 25, 27, July 7; minimum, freezing point Feb. 11, 13, 15, 16, 19, 22, 24, 27.

Period of record:
Specific conductance (1966-68, 1969-71): Maximum, 1,260 micromhos Jan. 29, 1970; minimum, 140 micromhos Aug. 30, 1970.
pH (1969-71): Maximum, 9.6 Aug. 10, 1971; minimum, 6.7 Feb. 11-13, 1971.
Dissolved oxygen (1970-71): Maximum, 15.0 mg/l Apr. 7-17, June 17-19, 1971; minimum, 1.0 mg/l June 4, 15, 1971.
Water temperatures (1966-68, 1969-71): Maximum, 30.0°C Aug. 21-24, 1968; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since January 1966. Minimum recorded dissolved oxygen concentration of 0.2 mg/l occurred July 1, 1966. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice a year to further define the quality of water. Sediment data for this station on page 401.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)
OCT.												
05...	1440	88	181	7	270	98	1.4	33	728	350	190	1090
24...	1100	130	160	0	200	76	1.1	39	598	310	180	912
NOV.												
16...	1610	165	151	0	240	77	1.0	56	638	320	200	962
25...	1255	170	176	0	230	86	1.2	50	688	350	200	1050
DEC.												
02...	1620	1150	128	0	110	39	.6	52	416	250	140	619
14...	1300	2240	202	0	180	58	.8	43	586	360	190	879
JAN.												
30...	1455	120	217	13	200	72	.8	50	668	410	210	1000
FEB.												
05...	1535	4630	231	0	190	82	1.2	50	696	390	200	1050
20...	1225	11600	59	0	35	19	.3	9.4	160	83	34	250
MAR.												
02...	1640	3260	124	0	70	21	.3	41	294	200	98	463
30...	1555	641	178	8	110	33	.4	48	460	320	160	690
APR.												
01...	1045	552	203	0	120	35	.4	41	492	330	160	718
30...	1450	226	226	0	160	54	.5	21	522	360	170	835
MAY												
05...	1100	242	221	0	160	53	.6	14	576	400	220	844
27...	1230	10100	108	0	53	18	.3	56	278	190	100	435
JUNE												
04...	1600	5590	126	0	63	18	.2	56	304	210	110	471
25...	0900	220	208	0	140	41	.5	50	522	350	180	786
JULY												
03...	1115	337	158	0	72	16	.4	34	312	230	100	509
14...	1050	1110	180	4	160	47	.6	39	512	330	180	783
AUG.												
03...	0725	170	150	0	160	50	.7	21	476	280	160	771
13...	1110	170	170	0	130	44	.6	14	424	270	130	682
SEP.												
09...	1705	513	196	0	210	87	.9	11	656	340	180	1010
25...	1100	248	178	0	150	64	.7	17	516	280	130	806

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.			
05...	18	0	.0
MAY			
20...	16	10	1.8

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1030	1020	928	806	1020	705	820	810	1060	1040	434	411
2	1120	1010	953	768	736	582	811	807	1090	1050	470	434
3	1050	1030	963	911	681	613	825	808	1080	1070	483	468
4	1050	980	967	960	709	681	829	813	1080	1040	511	476
5	1020	800	967	936	712	678	858	826	1060	786	527	512
6	---	---	966	957	714	685	883	852	786	460	569	524
7	---	---	967	948	711	693	913	882	474	457	608	569
8	---	---	966	957	711	693	918	867	459	409	659	606
9	---	---	958	943	---	---	867	780	414	393	695	656
10	---	---	943	928	---	---	780	774	392	352	716	695
11	---	---	934	918	---	---	805	778	360	324	705	674
12	---	---	927	909	---	---	822	802	351	325	680	650
13	---	---	934	904	---	---	819	804	361	322	665	642
14	---	---	945	918	864	625	808	802	360	336	642	548
15	---	---	1000	891	625	606	808	801	---	---	548	513
16	---	---	981	888	643	606	807	799	---	---	518	491
17	---	---	978	921	667	625	807	801	---	---	521	515
18	---	---	978	916	667	658	822	805	732	537	---	---
19	---	---	1010	943	658	642	862	819	648	300	563	539
20	---	---	1010	964	667	651	865	831	302	206	602	563
21	---	---	1010	808	703	667	---	---	225	207	613	602
22	---	---	1060	927	723	703	925	913	237	225	629	602
23	---	---	1120	969	724	703	936	907	276	233	652	620
24	---	---	1090	993	714	705	940	919	281	254	643	632
25	---	---	1070	1000	721	706	952	930	270	249	650	635
26	---	---	1090	1020	730	717	984	946	299	258	652	637
27	---	---	1120	945	744	730	988	967	359	299	662	652
28	---	---	1080	991	775	744	1000	976	423	356	670	658
29	941	886	1140	1050	805	771	1010	985	---	---	685	670
30	946	868	1100	981	813	801	1020	994	---	---	707	682
31	931	781	---	---	823	811	1050	1020	---	---	719	707
MONTH	---	---	1140	768	1020	582	1050	774	1090	206	719	411

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	730	718	852	819	614	596	501	494	756	726	795	783
2	733	712	856	828	641	614	506	498	756	734	799	787
3	754	733	859	829	686	590	513	506	747	680	802	790
4	769	751	883	844	590	436	516	510	773	669	807	801
5	784	764	888	802	449	434	527	515	746	740	820	807
6	791	782	802	507	483	440	533	524	744	723	829	819
7	790	769	555	447	545	483	545	530	724	703	867	829
8	779	766	560	525	594	545	548	542	708	690	960	865
9	769	755	542	525	641	594	555	548	694	681	1020	960
10	764	752	557	531	644	626	558	551	691	680	1040	1000
11	770	749	579	555	633	621	567	551	685	675	1030	993
12	778	763	605	579	650	626	591	566	688	679	1020	978
13	778	772	618	605	656	639	741	585	688	675	993	919
14	788	773	638	617	665	654	881	716	684	672	975	904
15	813	781	645	627	684	662	897	876	693	679	940	925
16	834	813	681	641	674	662	879	725	705	691	940	919
17	841	820	689	672	680	633	756	681	709	702	924	889
18	841	835	690	686	696	597	689	585	723	696	900	889
19	846	837	695	690	692	636	585	531	723	720	897	885
20	841	831	699	692	752	680	576	530	724	721	888	862
21	841	826	704	698	782	750	554	504	730	724	864	855
22	859	837	710	704	797	780	525	509	738	729	859	793
23	867	835	714	692	812	794	518	512	748	735	799	733
24	864	837	725	702	815	809	516	512	753	745	759	735
25	858	829	759	696	818	810	518	513	757	738	819	732
26	849	834	759	450	816	812	529	518	745	741	814	774
27	859	837	450	414	815	786	561	528	748	744	823	802
28	846	826	476	428	807	545	620	560	754	748	844	808
29	849	832	531	476	584	518	669	612	762	753	850	824
30	847	828	582	530	585	494	672	627	769	756	839	785
31	---	---	599	573	---	---	726	672	783	769	---	---
MONTH	867	712	888	414	818	434	897	494	783	669	1040	732
YEAR	1140	206										

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.7	7.5	7.6	7.3	---	---	7.9	7.8	7.8	7.7	7.8	7.7
2	7.8	7.5	7.4	7.3	---	---	7.9	7.8	7.8	7.7	7.8	7.6
3	7.7	7.6	7.6	7.4	---	---	7.9	7.8	7.7	7.7	7.9	7.8
4	7.9	7.6	7.6	7.5	---	---	7.9	7.7	7.7	7.5	8.0	7.8
5	7.8	7.6	7.6	7.5	---	---	7.9	7.8	7.7	7.5	7.8	7.7
6	7.9	7.6	7.7	7.5	---	---	7.8	7.8	7.5	7.3	7.9	7.6
7	8.0	7.6	7.6	7.6	8.1	7.8	7.8	7.7	7.2	7.1	8.0	7.9
8	8.1	7.4	7.6	7.6	8.0	7.8	7.8	7.7	7.1	7.0	8.1	8.0
9	7.8	7.4	7.7	7.6	7.8	7.7	7.8	7.7	7.1	7.0	8.1	7.9
10	7.8	7.4	7.8	7.7	7.8	7.7	7.7	7.6	7.1	6.9	7.9	7.9
11	7.4	7.2	7.8	7.7	7.8	7.7	7.6	7.6	6.9	6.7	7.9	7.9
12	7.2	7.1	7.7	7.6	7.8	7.8	7.6	7.6	6.7	6.7	7.9	7.8
13	7.3	7.0	7.7	7.6	7.8	7.8	7.6	7.5	6.8	6.7	7.8	7.7
14	7.4	7.1	7.8	7.7	7.9	7.6	7.6	7.5	6.8	6.8	7.7	7.5
15	7.2	7.1	7.9	7.8	7.6	7.4	7.6	7.5	6.9	6.8	7.6	7.5
16	7.3	7.1	8.1	7.9	7.6	7.5	7.7	7.5	7.0	6.8	7.6	7.5
17	7.3	7.1	8.2	8.1	7.7	7.6	7.6	7.6	7.0	6.9	7.5	7.5
18	7.5	7.2	8.2	8.1	7.6	7.6	7.6	7.6	7.4	7.0	---	---
19	7.5	7.3	8.3	8.2	7.7	7.5	7.6	7.6	7.4	7.3	8.0	7.7
20	7.2	7.1	8.3	8.1	7.8	7.7	7.6	7.5	7.9	7.3	8.1	8.0
21	7.3	7.1	8.3	8.2	7.9	7.8	---	---	7.9	7.6	8.1	8.0
22	7.2	7.0	8.4	8.2	7.8	7.8	7.5	7.5	7.6	7.5	8.0	8.0
23	7.2	7.0	8.5	8.4	8.0	7.7	7.5	7.4	7.8	7.6	8.1	8.1
24	7.3	7.0	8.6	8.5	8.0	7.9	7.5	7.4	7.7	7.6	8.1	8.0
25	7.3	7.2	8.7	8.5	8.0	7.9	7.5	7.4	7.6	7.4	8.0	8.0
26	7.3	7.2	8.7	8.5	8.1	7.9	7.6	7.4	7.6	7.5	8.0	8.0
27	7.3	7.1	8.5	8.4	7.9	7.9	7.6	7.6	7.8	7.5	8.0	8.0
28	7.3	7.1	8.6	8.4	7.9	7.7	7.7	7.6	7.9	7.8	8.0	8.0
29	7.5	7.3	8.4	---	7.9	7.8	7.7	7.6	---	---	8.1	8.0
30	7.5	7.3	---	---	7.9	7.8	7.7	7.6	---	---	8.1	8.0
31	7.5	7.3	---	---	7.9	7.8	7.7	7.7	---	---	8.0	8.0
MONTH	8.1	7.0	8.7	7.3	8.1	7.4	7.9	7.4	7.9	6.7	8.1	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.1	8.0	8.0	7.7	8.0	7.8	7.7	7.5	8.3	7.4	7.7	7.5
2	8.2	8.1	7.9	7.7	8.2	7.9	7.6	7.5	8.4	7.5	7.6	7.5
3	8.3	8.2	8.0	7.7	7.9	7.6	7.5	7.5	7.8	7.1	7.6	7.5
4	8.3	8.2	8.0	7.9	7.6	7.4	7.9	7.5	7.6	7.0	7.6	7.5
5	8.2	8.2	8.0	7.9	7.6	7.4	7.8	7.7	7.8	7.6	7.6	7.4
6	8.3	8.2	8.3	8.0	7.8	7.5	7.7	7.6	7.8	7.6	7.5	7.4
7	8.5	8.2	8.0	7.6	7.7	7.5	8.0	7.5	8.2	7.6	7.5	7.4
8	8.6	8.3	7.6	7.6	7.8	7.7	8.0	7.7	8.9	8.0	7.9	7.4
9	8.6	8.4	7.6	7.5	7.8	7.7	7.9	7.7	9.0	8.5	7.8	7.4
10	8.8	8.5	7.9	7.6	7.8	7.7	7.9	7.7	9.6	8.4	8.2	7.6
11	8.9	8.6	7.9	7.9	8.5	7.8	7.7	7.6	8.8	8.2	8.6	7.8
12	8.8	8.7	8.0	7.9	8.7	8.1	7.8	7.6	8.7	7.9	7.8	7.5
13	8.8	8.7	8.1	7.9	8.9	8.1	8.5	7.8	8.9	8.0	7.8	7.5
14	9.0	8.8	8.0	7.9	8.5	7.6	8.7	8.2	9.0	8.4	8.0	7.4
15	9.0	8.8	8.7	8.0	8.5	7.6	8.5	8.0	8.8	8.2	7.8	7.7
16	9.0	8.8	8.5	8.1	9.1	8.5	8.7	8.0	8.3	8.0	7.7	7.5
17	8.8	8.7	9.0	8.1	9.3	8.6	8.4	8.0	8.1	7.9	7.5	7.4
18	8.7	8.5	8.7	8.5	9.2	8.5	8.3	7.7	8.1	7.9	7.5	7.4
19	8.5	8.4	8.5	8.3	9.2	8.6	8.7	8.0	8.1	7.9	7.6	7.4
20	8.4	8.3	8.5	8.2	8.8	8.5	8.2	7.7	8.1	7.9	7.6	7.5
21	8.4	8.1	8.6	8.2	8.6	8.1	8.6	7.6	8.1	7.9	7.6	7.4
22	8.2	8.0	8.4	8.1	8.2	8.0	8.8	8.1	8.0	7.8	7.6	7.4
23	8.4	7.9	9.2	8.3	8.2	7.9	8.7	8.1	7.9	7.8	7.9	7.5
24	8.2	7.9	8.9	8.5	8.3	8.1	8.2	7.7	7.9	7.7	7.8	7.6
25	8.1	7.8	8.7	8.3	8.3	8.2	8.2	7.7	8.0	7.5	7.8	7.6
26	7.9	7.7	8.7	7.7	8.2	7.9	8.1	7.8	7.7	7.5	7.8	7.7
27	7.8	7.6	7.7	7.7	8.3	8.0	8.6	7.8	7.9	7.5	8.2	7.7
28	7.9	7.7	7.8	7.7	8.2	7.6	8.3	8.0	7.9	7.5	8.4	8.0
29	7.9	7.7	7.9	7.8	7.7	7.3	8.9	8.0	7.9	7.5	8.6	8.1
30	7.9	7.7	8.0	7.8	7.6	7.3	8.1	7.4	8.6	7.6	8.2	7.7
31	---	---	7.8	7.7	---	---	8.0	7.4	8.2	7.4	---	---
MONTH	9.0	7.6	9.2	7.5	9.3	7.3	8.9	7.4	9.6	7.0	8.6	7.4
YEAR	9.6	6.7										

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.4	3.0	6.8	3.3	9.9	9.5	12.2	12.1	5.6	4.7	12.2	11.3
2	7.1	3.4	4.0	2.8	9.7	8.8	12.2	12.0	5.7	3.5	11.7	10.8
3	7.3	5.7	6.5	4.1	9.0	7.9	12.0	11.6	4.8	3.9	11.4	10.5
4	8.8	6.2	6.4	4.5	9.1	8.7	11.6	10.6	5.3	2.2	11.1	10.7
5	8.7	6.4	7.2	5.3	9.3	8.4	11.3	9.8	7.5	2.8	11.6	11.1
6	10.5	6.7	7.2	5.8	10.5	9.3	9.8	8.3	9.2	7.2	11.5	10.6
7	10.7	7.1	7.8	6.8	10.6	10.2	9.3	8.7	9.4	8.3	11.6	10.6
8	11.4	6.3	7.4	6.5	11.7	10.5	10.2	9.3	8.5	7.5	10.8	10.2
9	8.8	5.6	8.5	7.0	11.6	10.9	10.3	10.0	7.6	6.4	11.5	9.9
10	9.5	5.1	9.1	8.4	11.3	10.7	10.3	10.2	6.4	4.6	11.1	10.0
11	6.4	4.2	8.6	7.2	11.5	11.1	10.3	10.0	4.6	3.5	10.6	9.7
12	4.1	2.8	7.6	6.2	11.7	11.4	10.3	9.8	3.5	2.5	10.2	9.8
13	6.5	1.4	7.0	6.8	11.8	11.3	9.8	9.0	2.6	1.9	10.3	10.1
14	6.9	3.9	7.4	7.0	11.6	10.6	9.0	8.7	2.0	1.6	11.6	10.2
15	4.2	2.8	8.5	7.4	12.0	10.7	8.7	8.6	1.7	1.2	10.6	9.5
16	5.7	3.5	10.4	7.5	11.0	10.1	8.7	8.4	1.6	1.2	10.6	9.3
17	7.0	3.6	10.8	9.9	10.6	10.2	8.6	7.6	2.1	1.3	10.5	10.2
18	7.5	4.7	11.3	10.2	10.3	9.6	8.2	7.9	5.9	2.0	---	---
19	8.0	5.0	11.6	10.8	11.8	9.6	7.9	7.0	---	---	13.3	11.7
20	4.8	3.5	10.8	9.9	12.1	11.6	7.0	6.0	---	---	13.4	11.1
21	5.8	3.6	11.6	10.7	12.1	11.9	---	---	---	---	11.9	11.3
22	5.3	2.6	11.6	11.1	12.0	11.1	6.5	5.7	---	---	11.9	11.4
23	4.0	2.3	12.3	11.4	12.0	10.4	5.9	5.4	---	---	12.0	11.5
24	4.4	2.1	12.9	12.2	12.8	12.0	5.5	5.1	---	---	12.2	11.7
25	4.7	2.9	12.9	12.4	12.6	12.4	5.6	5.1	12.8	10.3	13.2	12.0
26	5.2	3.7	12.9	12.6	12.6	11.6	5.3	4.7	12.6	11.6	13.5	13.1
27	5.9	3.4	12.7	12.5	11.8	11.6	5.5	4.9	12.3	11.4	14.1	13.3
28	5.9	2.9	12.6	12.4	11.8	11.5	6.1	5.1	12.6	12.0	14.6	13.8
29	6.3	4.6	12.4	11.8	11.7	11.4	6.2	5.5	---	---	14.8	13.9
30	6.3	2.5	11.9	9.2	12.0	11.6	6.2	5.2	---	---	14.4	11.3
31	6.2	2.3	---	---	12.2	11.9	5.3	5.0	---	---	11.6	10.2
MONTH	11.4	1.4	12.9	2.8	12.8	7.9	12.2	4.7	12.8	1.2	14.8	9.3

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.3	10.7	6.9	5.0	5.4	4.1	4.0	2.2	4.6	2.1	3.7	2.4
2	12.5	11.9	6.5	4.8	6.8	4.6	3.6	1.7	4.7	2.7	3.4	2.4
3	14.3	12.4	7.1	5.0	5.3	2.0	2.7	1.7	6.5	2.0	3.0	2.5
4	13.6	12.6	7.1	5.3	5.4	1.0	6.1	2.5	3.0	2.1	2.7	2.1
5	13.2	12.4	7.8	5.0	5.8	4.9	5.0	3.9	3.1	2.9	3.7	1.5
6	13.5	12.5	7.0	5.6	6.5	4.4	3.9	2.5	3.2	2.1	3.3	1.9
7	15.0	12.8	5.7	5.1	5.4	4.1	6.4	2.2	5.5	2.6	2.3	1.7
8	15.0	14.5	---	---	5.3	4.3	6.1	4.4	5.4	3.9	3.1	1.7
9	15.0	15.0	---	---	5.1	4.1	4.9	3.4	5.9	4.4	2.8	1.3
10	15.0	15.0	---	---	4.6	3.6	4.6	3.5	8.4	3.9	5.1	2.0
11	15.0	15.0	---	---	8.7	3.9	3.6	1.8	7.8	6.0	7.4	2.7
12	15.0	15.0	---	---	9.4	5.8	3.7	2.3	7.4	4.4	2.7	1.3
13	15.0	15.0	7.6	6.9	9.9	5.8	6.7	3.5	8.0	4.6	3.2	1.5
14	15.0	15.0	6.9	6.3	7.8	1.4	8.1	5.0	9.0	6.0	6.6	2.0
15	15.0	13.2	10.8	7.2	7.2	1.0	7.0	4.8	7.6	5.3	5.9	4.0
16	15.0	14.8	10.2	7.9	11.0	7.1	7.6	4.5	5.8	4.4	4.0	2.1
17	15.0	13.6	14.5	7.8	15.0	9.1	6.1	4.2	5.6	3.6	3.1	2.2
18	13.6	9.5	11.4	10.0	15.0	6.6	5.7	2.6	4.9	3.4	2.7	1.7
19	9.5	8.4	10.0	8.5	15.0	12.3	5.4	3.1	4.5	3.7	3.3	1.6
20	8.9	7.0	9.3	7.6	12.4	7.9	3.8	2.4	4.9	3.9	6.1	1.7
21	9.5	7.6	10.0	7.4	7.9	2.1	7.2	2.6	5.4	3.7	4.2	3.0
22	8.2	5.2	8.2	6.3	4.7	3.0	8.4	5.4	5.5	4.1	3.6	2.1
23	8.7	4.6	12.5	6.0	4.5	1.9	7.9	5.8	4.6	3.2	4.5	2.4
24	5.6	4.3	9.9	6.4	5.6	3.6	6.5	4.0	4.0	2.9	4.1	2.3
25	6.1	4.8	7.6	5.2	5.4	3.9	5.6	3.5	4.0	2.3	3.9	2.6
26	5.5	4.0	7.3	5.4	4.4	1.8	5.1	4.3	3.4	2.5	3.1	2.3
27	5.4	4.2	6.8	6.1	5.2	2.2	6.0	4.1	4.0	2.6	9.1	2.3
28	6.0	4.6	8.6	5.1	3.9	1.2	5.2	4.1	3.3	2.2	8.9	6.4
29	6.1	5.3	5.7	4.6	3.5	2.1	6.6	3.4	6.1	1.5	9.0	5.8
30	6.6	4.8	5.3	4.3	2.8	2.2	3.6	1.6	8.5	3.5	7.4	4.8
31	---	---	4.7	3.7	---	---	4.5	2.3	6.3	1.9	---	---
MONTH	15.0	4.0	14.5	3.7	15.0	1.0	8.4	1.6	9.0	1.5	9.1	1.3
YEAR	15.0	1.0										

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	18.0	13.5	13.0	6.5	3.5	1.0	1.0	2.0	2.0	4.5	2.5
2	18.5	17.5	13.0	12.0	7.5	5.5	1.5	0.5	2.0	2.0	3.5	2.5
3	18.0	16.5	12.0	11.0	8.0	7.0	1.5	1.0	2.0	2.0	3.5	2.5
4	16.5	15.5	11.0	10.5	7.5	5.5	1.5	1.0	2.5	2.0	3.0	2.0
5	16.0	16.0	10.5	10.0	7.5	5.0	1.5	1.0	2.0	0.5	3.0	2.0
6	17.0	15.5	10.0	9.5	5.5	4.5	1.5	1.0	1.0	0.5	2.5	2.0
7	17.5	16.5	9.5	9.5	5.0	4.5	1.5	1.0	1.0	0.5	2.0	1.5
8	18.5	17.0	9.5	9.5	4.5	2.5	1.0	1.0	0.5	0.5	2.0	1.0
9	19.0	17.0	10.0	9.5	5.0	4.0	1.0	1.0	0.5	0.5	2.0	0.5
10	18.5	16.5	10.0	9.5	4.5	4.0	1.5	1.0	1.0	0.5	2.0	1.5
11	17.0	15.5	10.0	9.5	5.0	3.5	1.5	1.0	1.0	0.0	2.0	1.5
12	16.0	16.0	10.0	9.5	4.5	2.5	1.5	1.0	1.0	1.0	2.5	2.0
13	17.5	15.0	10.0	9.5	3.0	2.0	1.5	1.0	1.0	0.0	3.0	2.5
14	17.5	16.5	9.5	8.5	2.5	2.0	1.5	1.0	1.0	0.5	5.5	3.0
15	17.0	15.5	8.5	7.5	2.5	1.5	1.5	1.5	1.0	0.0	7.0	5.5
16	15.5	14.5	7.5	6.5	2.0	1.5	2.0	1.5	1.0	0.0	7.0	4.5
17	14.5	13.5	6.5	5.0	1.5	1.0	2.0	1.5	1.0	1.0	5.0	4.5
18	14.0	13.0	6.5	4.5	1.5	0.5	2.0	1.5	1.0	0.5	---	---
19	14.5	13.0	6.0	4.5	2.0	0.5	2.0	1.5	1.0	0.0	3.5	3.0
20	13.5	12.0	6.5	5.0	1.5	0.5	2.0	1.5	1.0	0.5	3.0	2.5
21	13.5	12.5	6.0	4.0	1.0	0.5	---	---	0.5	0.5	3.0	2.0
22	13.0	13.0	6.0	3.5	1.0	0.5	2.0	2.0	0.5	0.0	3.5	3.0
23	14.0	12.0	3.5	1.5	2.5	0.5	2.0	1.5	0.5	0.5	3.5	3.0
24	13.0	12.5	1.5	1.0	1.0	0.5	2.0	2.0	0.5	0.0	4.0	3.0
25	13.5	13.0	1.0	1.0	1.0	0.5	2.0	1.5	1.0	0.5	3.5	3.0
26	13.5	13.0	1.0	1.0	1.0	0.5	2.0	1.5	1.0	0.5	3.5	3.0
27	14.5	13.0	1.5	1.0	1.0	0.5	2.0	2.0	2.0	0.0	4.5	2.5
28	14.5	13.5	2.0	1.5	1.0	0.5	2.5	2.0	3.5	2.0	6.0	3.0
29	14.5	14.0	3.5	1.0	1.0	0.5	2.0	2.0	---	---	5.0	4.5
30	14.5	13.0	4.0	3.0	1.0	0.5	2.0	2.0	---	---	7.0	3.0
31	14.0	13.0	---	---	1.0	0.5	2.0	2.0	---	---	8.0	4.5
MONTH	19.0	12.0	13.5	1.0	8.0	0.5	2.5	0.5	3.5	0.0	8.0	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.5	14.0	9.0	19.5	17.0	28.5	25.5	21.0	19.0	24.0	23.5
2	7.5	7.0	12.5	8.5	22.5	19.5	27.0	25.5	22.0	20.0	24.0	23.0
3	7.0	6.0	15.0	9.0	24.0	20.0	25.5	24.5	22.0	21.0	24.0	23.5
4	9.5	4.5	13.5	11.0	---	---	27.0	24.5	21.0	20.5	24.0	23.5
5	7.5	4.5	14.5	11.0	---	---	26.5	25.0	23.0	20.5	25.5	23.5
6	7.5	4.5	13.5	12.0	---	---	25.0	24.5	22.5	22.0	25.0	24.5
7	9.5	4.5	13.5	12.0	---	---	29.0	24.0	26.0	21.5	25.5	24.0
8	10.0	7.5	12.5	11.5	---	---	27.5	26.0	27.0	24.0	26.0	24.0
9	10.5	8.5	16.0	11.5	---	---	26.5	26.0	26.5	24.5	25.5	24.5
10	11.0	9.0	14.5	11.0	---	---	26.5	25.5	27.5	25.5	27.0	24.0
11	12.0	9.0	15.5	14.0	---	---	25.5	24.5	27.5	25.0	26.5	25.0
12	13.0	10.5	17.0	14.5	---	---	25.0	24.5	27.0	24.5	25.0	23.5
13	13.0	12.0	18.5	14.0	---	---	27.0	25.0	27.0	24.5	24.5	23.0
14	15.0	12.0	14.0	13.0	---	---	26.5	24.0	27.5	25.0	25.5	22.5
15	14.5	12.5	19.0	13.5	---	---	25.0	23.5	26.5	25.0	24.5	23.0
16	16.5	12.5	19.5	15.0	---	---	25.5	23.5	25.0	24.0	23.0	22.0
17	16.5	14.5	24.5	17.0	---	---	24.5	23.5	24.0	23.5	22.0	21.0
18	15.0	14.5	22.0	20.5	---	---	25.0	23.0	28.5	23.0	21.0	20.5
19	14.5	14.0	22.0	20.5	---	---	25.5	23.5	27.0	25.5	21.0	20.0
20	15.5	14.5	22.0	20.0	---	---	24.5	22.5	26.5	25.0	20.5	19.0
21	15.5	14.5	23.5	20.0	26.5	26.0	26.0	22.0	26.5	25.0	19.5	18.5
22	16.0	14.0	21.0	19.5	26.0	25.0	26.0	24.0	28.0	25.0	20.5	19.0
23	18.0	14.0	23.0	19.0	27.5	24.5	26.0	24.5	26.5	25.0	20.0	19.0
24	15.0	12.0	22.5	20.5	29.0	26.0	25.0	24.5	26.5	24.0	19.5	19.0
25	16.0	13.0	21.0	17.5	29.0	26.5	26.5	24.0	28.0	24.5	19.0	18.0
26	15.0	13.0	---	---	27.5	26.5	26.0	25.0	26.5	25.0	18.0	17.5
27	14.0	12.5	---	---	29.0	26.0	25.5	24.0	25.5	24.5	20.0	17.5
28	13.5	12.0	---	---	28.5	25.0	24.5	23.5	25.0	23.5	20.5	19.0
29	12.5	11.0	---	---	27.0	25.5	23.5	19.5	26.0	23.0	22.0	20.0
30	14.0	12.5	---	---	27.0	25.0	20.5	19.0	27.0	24.0	20.0	19.5
31	---	---	---	---	---	---	20.0	18.5	26.0	24.0	---	---
MONTH	18.0	4.5	24.5	8.5	---	---	29.0	18.5	28.5	19.0	27.0	17.5
YEAR	29.0	0.0										

04193500 MAUMEE RIVER AT WATERVILLE, OHIO

LOCATION.--Lat 41°30'00", long 83°42'46", Lucas County, in water treatment plant 1,500 ft upstream from gaging station, 3 miles downstream from Tontogany Creek, and 21.1 miles upstream from mouth.

DRAINAGE AREA.--6,330 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1950 to February 1952, May 1963 to September 1971.
Water temperatures: March 1950 to September 1971.
Sediment records: April 1950 to September 1971.

EXTREMES.--1970-71:
Sediment concentrations: Maximum daily, 430 mg/l Feb. 22; minimum daily, 10 mg/l on several days during October, November, and February.
Sediment discharges: Maximum daily, 45,200 tons Feb. 22; minimum daily, 8.8 tons Oct. 7.

Period of record:
Specific conductance (1950-52, 1963-65, 1967-68): Maximum, 1,150 micromhos Dec. 19, 1964; minimum, 213 micromhos Jan. 30, 1952.
pH (1966-67): Maximum, 11.1 Nov. 7, 1966; minimum, 6.1 Feb. 6, May 12, 14, 1967.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.								
06...	0930	--	--	--	--	--	--	--
12...	1630	686	240	0	120	53	.4	4.7
28...	1745	734	224	0	110	44	.8	15
NOV.								
02...	1645	920	217	0	95	46	.6	17
06...	1320	1250	212	13	120	45	.7	17
DEC.								
09...	1520	2410	191	0	90	31	.4	42
18...	1420	3450	226	0	120	41	.4	39
JAN.								
14...	--	1100	241	14	140	73	.5	33
FEB.								
12...	1445	5600	72	0	42	26	.3	18
MAR.								
11...	1245	4130	164	0	80	27	.3	27
24...	1515	6520	180	0	84	27	.2	37
APR.								
01...	1500	2400	214	0	100	25	.3	32
20...	1600	1850	249	0	120	34	.5	9.2
MAY								
06...	1030	1590	234	0	110	42	.5	7.6
12...	1500	7000	160	0	73	26	.2	52
21...	1110	--	--	--	--	--	--	--
JUNE								
09...	1600	3660	158	0	61	21	.3	49
30...	1630	2200	192	8	100	34	.6	15
JULY								
09...	0830	440	210	0	140	52	.6	14
21...	1630	1100	192	0	90	40	.5	12
AUG.								
03...	1050	500	182	6	110	64	.7	11
10...	1340	240	162	2	88	43	.7	8.4
SEP.								
01...	1625	220	192		98	45	.7	3.5
30...	1045	1900	213	4	150	98	1.0	2.6

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

						PARTICLE SIZE										
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
DATE	TIME	WATER TEMP-ERA-TURE (°C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
FEB. 24,1971	1700	--	28000	318	24000	82	84	91	96	99	99	99	100	--	--	--
MAY 10......	1530	7.0	17700	239	11400	71	82	90	95	98	99	100	--	--	--	--

04193500 MAUMEE RIVER AT WATERVILLE OHIO--Continued

EXTREMES.--Period of record--Continued
Dissolved oxygen (1966-68): Maximum, 15.0 mg/l Oct. 4, 1966, Jan. 2, 6, 1967, Apr. 28, 1968; minimum, 3.1 mg/l May 17, 1968.
Water temperatures (1950-69): Maximum, 34.0°C July 1, 1963; minimum, freezing point on many days during winter periods.
Sediment concentrations: Maximum daily, 2,240 mg/l Mar. 26, 1954; minimum daily, 1 mg/l on many days during 1953, 1955 and 1963.
Sediment discharges: Maximum daily, 208,000 tons Feb. 12, 1959; minimum daily, 0.26 ton Sept. 18, 1955.

REMARKS.--Continuous water-quality recorder operated since May 1963. Maximum recorded pH of 11.4 occurred Jan. 16, 1965. Minimum recorded pH of 5.0 occurred Nov. 24, 1968. Minimum recorded dissolved oxygen concentration of 0.3 mg/l occurred Nov. 10, 1965. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. Tabular data omitted for those periods when no data were recorded. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on the maximum specific conductance and the minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. Flow affected by ice Nov. 25-27, Dec. 15-17, Dec. 20 to Jan. 3, Jan. 7 to Feb. 4, Feb. 13-17.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
06...	--	--	--	--	--	8.5	.4
12...	1.6	428	290	86	728	--	--
28...	1.6	468	290	100	711	--	--
NOV.							
02...	1.2	426	280	100	686	--	--
06...	1.1	442	310	110	693	--	--
DEC.							
09...	.84	384	290	130	629	--	--
18...	1.1	450	330	140	741	--	--
JAN.							
14...	1.5	590	380	160	896	--	--
FEB.							
12...	1.5	202	110	51	322	--	--
MAR.							
11...	.77	326	230	96	527	--	--
24...	.58	368	260	110	578	--	--
APR.							
01...	.56	464	300	120	639	--	--
20...	.67	454	330	120	717	--	--
MAY							
06...	.82	426	320	130	714	--	--
12...	1.2	360	260	130	570	--	--
21...	--	--	--	--	--	11	.7
JUNE							
09...	1.3	332	240	110	503	--	--
30...	1.2	414	240	120	646	--	--
JULY							
09...	.86	460	330	160	736	--	--
21...	1.3	372	270	100	698	--	--
AUG.							
03...	1.4	406	270	110	664	--	--
10...	1.1	330	220	84	547	--	--
SEP.							
01...	1.4	366	250	92	605	--	--
30...	1.7	526	300	120	862	--	--

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	770	730	670	610	---	---	730	720	---	---	---	---
2	780	740	700	630	---	---	730	720	---	---	---	---
3	780	740	710	680	---	---	740	720	---	---	---	---
4	780	720	700	680	---	---	740	710	---	---	---	---
5	780	670	710	690	---	---	780	730	---	---	---	---
6	760	670	710	690	---	---	800	780	---	---	---	---
7	760	670	720	690	---	---	820	800	---	---	---	---
8	740	660	730	700	---	---	820	800	---	---	---	---
9	760	660	740	720	630	590	830	810	---	---	---	---
10	740	660	---	---	620	610	830	810	---	---	---	---
11	720	670	---	---	610	610	820	820	---	---	---	---
12	740	670	---	---	630	590	---	---	---	---	---	---
13	750	710	---	---	630	620	---	---	---	---	---	---
14	730	690	---	---	670	630	---	---	---	---	---	---
15	750	710	---	---	670	670	---	---	---	---	---	---
16	720	690	---	---	690	670	---	---	---	---	---	---
17	730	700	---	---	710	660	---	---	---	---	---	---
18	730	710	---	---	750	710	---	---	---	---	---	---
19	740	710	---	---	760	690	---	---	---	---	---	---
20	770	740	---	---	720	690	---	---	---	---	---	---
21	780	750	---	---	700	660	---	---	---	---	---	---
22	830	780	---	---	700	660	---	---	---	---	---	---
23	790	750	---	---	680	660	---	---	---	---	---	---
24	790	760	---	---	660	660	---	---	---	---	580	580
25	790	740	---	---	670	660	---	---	---	---	590	580
26	760	720	---	---	700	670	---	---	---	---	590	580
27	750	710	---	---	700	690	---	---	---	---	620	580
28	740	650	---	---	700	690	---	---	---	---	640	620
29	680	610	---	---	700	690	---	---	---	---	640	640
30	670	610	---	---	720	700	---	---	---	---	650	630
31	670	600	---	---	720	710	---	---	---	---	660	650
MONTH	830	600	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	660	620	730	690	540	530	680	590	680	640	610	550
2	660	620	730	680	590	540	690	630	690	600	610	520
3	660	630	720	630	670	590	690	610	680	630	590	540
4	680	640	---	---	680	580	720	620	690	630	630	540
5	690	660	---	---	670	590	780	590	670	600	580	550
6	700	670	---	---	650	580	730	680	650	560	640	570
7	710	670	680	610	590	560	750	680	640	540	650	590
8	---	---	640	510	580	550	750	710	620	530	660	630
9	---	---	570	520	550	460	750	670	620	530	690	650
10	---	---	580	560	540	500	710	650	630	510	720	690
11	---	---	---	---	570	540	720	670	620	540	740	720
12	---	---	---	---	600	560	740	640	610	510	770	730
13	---	---	---	---	590	590	690	630	580	480	790	750
14	---	---	---	---	600	590	680	600	560	500	790	650
15	---	---	---	---	620	590	650	560	560	500	800	740
16	700	660	---	---	610	560	590	550	570	500	---	---
17	710	660	---	---	610	580	600	550	570	470	---	---
18	690	680	---	---	620	570	620	550	580	490	---	---
19	690	680	---	---	610	560	630	590	550	440	---	---
20	680	660	---	---	600	560	630	570	550	470	---	---
21	700	680	640	620	590	550	620	560	540	470	---	---
22	690	680	650	620	580	520	610	550	570	420	---	---
23	690	680	650	600	590	540	610	530	600	530	---	---
24	770	690	650	610	630	550	640	570	600	500	---	---
25	700	670	640	620	650	590	620	540	580	520	---	---
26	710	670	680	630	610	560	600	560	580	520	---	---
27	710	680	740	680	620	510	620	580	590	540	---	---
28	720	690	720	490	620	570	720	580	610	520	---	---
29	730	700	500	480	630	590	690	620	580	520	---	---
30	730	690	500	500	660	620	690	590	580	510	900	860
31	---	---	530	500	---	---	670	610	570	530	---	---
MONTH	---	---	---	---	680	460	780	530	690	420	---	---

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	9.4	9.0	9.9	7.8	8.8	8.0	9.0	8.3	8.4	7.9
2	---	---	9.5	9.0	9.9	7.3	8.6	7.9	9.8	8.2	8.3	7.6
3	---	---	9.5	9.0	9.9	7.3	8.6	7.8	10.0	8.2	9.5	7.7
4	---	---	---	---	9.8	7.4	8.6	7.8	9.0	8.0	10.5	7.6
5	---	---	---	---	9.9	6.9	8.1	7.8	9.0	8.4	10.7	7.6
6	---	---	---	---	6.9	6.6	7.9	7.4	9.2	8.4	10.4	8.0
7	---	---	8.1	6.6	7.2	6.8	8.7	7.3	11.2	8.6	10.0	7.6
8	---	---	7.6	6.0	7.3	7.2	8.6	7.5	11.2	8.5	10.5	7.6
9	---	---	8.9	7.1	7.4	7.2	8.7	7.7	9.6	8.3	10.4	8.1
10	---	---	8.1	7.2	7.4	7.3	9.1	7.9	10.6	8.0	10.5	7.9
11	---	---	---	---	7.4	7.3	8.3	8.0	9.1	7.9	10.3	7.9
12	---	---	---	---	7.6	7.3	8.4	8.1	9.4	8.5	8.3	7.5
13	---	---	---	---	7.8	7.4	8.6	8.2	11.4	8.5	8.5	7.6
14	---	---	---	---	7.9	7.5	8.4	8.0	11.0	9.2	10.2	7.5
15	---	---	---	---	7.9	7.6	8.2	7.9	10.9	9.0	8.6	7.6
16	9.6	9.0	---	---	8.4	7.7	8.6	8.0	10.7	8.6	---	---
17	10.0	9.2	---	---	8.5	8.0	8.6	8.1	11.1	8.5	---	---
18	9.4	9.1	---	---	8.9	8.0	8.9	8.2	11.1	8.6	---	---
19	10.3	9.1	---	---	8.7	8.1	8.8	8.2	11.1	8.5	---	---
20	---	9.1	---	---	8.4	7.8	10.8	8.3	8.9	8.5	---	---
21	---	9.0	10.7	8.8	8.1	7.6	10.7	8.5	9.0	8.5	---	---
22	9.8	9.0	10.8	9.9	7.8	7.3	9.3	8.1	8.9	8.5	---	---
23	9.5	9.0	11.0	10.0	8.6	7.3	9.2	8.2	8.9	8.5	---	---
24	10.4	8.8	10.9	8.8	8.6	8.0	8.9	8.2	11.1	8.4	---	---
25	9.4	8.7	10.7	10.2	8.3	7.8	9.0	8.1	11.1	8.7	---	---
26	9.5	8.9	10.4	10.3	10.7	7.7	---	---	9.1	7.8	---	---
27	9.5	8.7	10.3	9.8	10.3	8.0	---	---	8.1	7.4	---	---
28	9.6	9.0	9.8	9.4	10.2	7.3	---	---	8.1	7.7	---	---
29	9.7	8.8	9.8	9.4	8.3	7.2	---	---	8.4	7.7	---	---
30	9.5	9.0	9.9	9.3	8.6	7.4	8.5	8.2	8.5	7.8	10.6	8.3
31	---	---	9.8	8.3	---	---	8.8	8.1	8.5	8.0	---	---
MONTH	---	---	---	---	10.7	6.6	10.8	7.3	11.4	7.4	---	---

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	9.4	8.7	---	---	---	---	---	---	---	---
2	---	---	9.3	8.7	---	---	---	---	---	---	---	---
3	---	---	9.5	8.8	---	---	---	---	---	---	---	---
4	---	---	9.4	8.8	---	---	---	---	---	---	---	---
5	---	---	9.5	8.8	---	---	---	---	---	---	---	---
6	---	---	9.5	8.8	---	---	---	---	---	---	---	---
7	---	---	9.5	8.6	---	---	14.3	13.1	---	---	---	---
8	---	---	9.2	8.4	---	---	14.0	12.8	---	---	---	---
9	---	---	8.8	8.5	---	---	14.0	12.6	---	---	---	---
10	---	---	---	---	---	---	13.5	12.0	---	---	---	---
11	---	---	---	---	---	---	13.7	11.8	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	14.5	14.1
25	---	---	---	---	---	---	---	---	---	---	15.0	12.2
26	---	---	---	---	---	---	---	---	---	---	15.0	13.4
27	---	---	---	---	---	---	---	---	---	---	15.0	12.2
28	12.5	9.8	---	---	---	---	---	---	---	---	12.2	9.3
29	10.3	9.4	---	---	---	---	---	---	---	---	---	---
30	10.1	9.1	---	---	---	---	---	---	---	---	---	---
31	9.7	8.9	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.5	6.8	5.4	4.6	8.3	7.9	7.2	6.9	7.0	6.8
2	---	---	8.0	6.9	4.8	3.8	8.3	7.9	7.2	6.8	7.2	7.0
3	---	---	8.7	6.6	4.1	3.7	8.3	7.8	7.1	6.8	7.4	7.2
4	---	---	---	---	4.8	3.2	8.2	7.7	7.0	6.9	7.6	7.4
5	---	---	---	---	4.9	4.2	7.9	7.6	7.1	6.8	7.9	7.6
6	---	---	---	---	4.6	3.7	7.9	7.5	7.2	6.8	7.9	7.8
7	---	---	10.2	8.1	4.9	3.9	8.0	7.3	7.1	6.7	8.1	7.9
8	---	---	10.1	7.0	4.8	4.7	7.6	7.3	7.0	6.7	8.2	8.0
9	---	---	7.1	5.5	5.0	4.8	7.5	7.2	7.1	6.8	8.1	8.0
10	---	---	5.9	4.5	5.3	5.0	7.6	7.2	7.1	6.8	8.2	7.9
11	---	---	---	---	5.4	5.1	7.4	7.1	6.9	6.8	8.2	8.0
12	---	---	---	---	5.6	5.3	7.5	7.1	7.1	6.8	8.2	8.0
13	---	---	---	---	5.7	5.5	7.4	7.1	7.0	6.7	8.2	8.0
14	---	---	---	---	5.9	5.6	7.4	7.1	7.0	6.7	8.2	8.0
15	---	---	---	---	6.1	5.8	7.4	7.1	6.9	6.7	8.2	8.1
16	11.2	8.0	---	---	6.4	6.1	7.4	7.1	6.9	6.7	---	---
17	9.5	7.5	---	---	6.6	6.3	7.3	7.1	7.0	6.7	---	---
18	8.5	7.1	---	---	6.8	6.5	7.5	7.0	7.0	6.6	---	---
19	8.8	7.1	---	---	7.1	6.7	7.3	7.0	6.9	6.7	---	---
20	9.0	6.5	---	---	7.2	7.1	7.5	7.1	6.9	6.7	---	---
21	8.1	6.6	10.5	7.9	7.4	7.2	7.6	7.1	6.8	6.7	---	---
22	8.9	7.0	8.2	7.0	7.6	7.3	7.4	7.1	6.9	6.7	---	---
23	8.8	6.6	7.7	6.3	7.7	7.6	7.4	7.1	6.8	6.6	---	---
24	8.5	6.3	7.0	5.9	7.9	7.6	7.3	7.1	6.8	6.6	---	---
25	8.4	6.4	5.9	5.4	8.6	7.9	7.4	7.0	6.8	6.6	---	---
26	8.1	6.2	5.4	5.1	9.0	8.5	7.2	7.0	6.6	6.2	---	---
27	7.9	6.3	5.3	3.6	9.1	8.7	7.3	7.0	6.4	6.2	---	---
28	8.3	7.2	5.4	3.0	8.9	8.6	7.3	7.0	6.6	6.3	---	---
29	8.6	7.1	4.4	3.5	8.6	8.3	7.2	7.0	6.8	6.4	---	---
30	9.0	6.7	4.5	3.6	8.5	8.2	7.0	6.9	6.7	6.5	---	---
31	---	---	5.5	4.4	---	---	7.2	6.9	6.8	6.6	---	---
MONTH	---	---	---	---	9.1	3.2	8.3	6.9	7.2	6.2	---	---

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	13.5	13.5	12.0	---	---	0.0	0.0	---	---	---	---
2	19.0	13.5	12.0	10.5	---	---	0.0	0.0	---	---	---	---
3	16.0	13.5	11.5	10.0	---	---	0.0	0.0	---	---	---	---
4	17.5	11.0	10.5	9.5	---	---	1.0	0.0	---	---	---	---
5	17.0	12.0	10.0	9.0	---	---	0.0	0.0	---	---	---	---
6	20.0	12.5	10.5	8.5	---	---	1.5	0.0	---	---	---	---
7	19.0	14.0	11.0	8.0	---	---	2.0	1.0	---	---	---	---
8	20.5	15.0	10.5	8.0	---	---	2.0	1.0	---	---	---	---
9	20.5	16.0	9.5	9.0	6.0	5.0	2.0	1.0	---	---	---	---
10	18.0	14.0	---	---	5.5	4.5	3.0	2.0	---	---	---	---
11	17.0	13.0	---	---	5.0	4.5	3.0	2.5	---	---	---	---
12	16.0	15.0	---	---	4.5	3.5	---	---	---	---	---	---
13	17.5	15.5	---	---	4.5	3.5	---	---	---	---	---	---
14	18.5	16.0	---	---	4.5	3.5	---	---	---	---	---	---
15	16.5	14.5	---	---	3.5	1.5	---	---	---	---	---	---
16	14.5	12.5	---	---	2.5	2.0	---	---	---	---	---	---
17	13.5	11.5	---	---	3.5	2.5	---	---	---	---	---	---
18	14.0	11.0	---	---	4.0	3.0	---	---	---	---	---	---
19	15.0	11.5	---	---	5.0	4.0	---	---	---	---	---	---
20	13.0	12.0	---	---	4.0	4.0	---	---	---	---	---	---
21	14.0	12.0	---	---	4.0	3.5	---	---	---	---	---	---
22	15.5	11.5	---	---	3.5	3.0	---	---	---	---	---	---
23	16.0	11.5	---	---	4.0	3.0	---	---	---	---	---	---
24	15.5	12.0	---	---	3.0	1.0	---	---	---	---	4.0	3.0
25	16.5	12.5	---	---	1.5	0.5	---	---	---	---	4.0	2.0
26	15.5	13.0	---	---	0.5	0.0	---	---	---	---	4.5	2.0
27	16.0	13.0	---	---	0.0	0.0	---	---	---	---	6.5	3.0
28	15.0	13.5	---	---	0.0	0.0	---	---	---	---	11.0	6.0
29	15.5	14.0	---	---	0.0	0.0	---	---	---	---	12.0	8.0
30	16.5	13.0	---	---	0.0	0.0	---	---	---	---	14.5	7.0
31	15.5	12.5	---	---	0.0	0.0	---	---	---	---	---	---
MONTH	20.5	11.0	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	15.5	10.5	19.0	17.0	30.5	27.0	27.5	20.5	26.5	20.0
2	---	---	13.5	10.5	19.0	17.5	29.0	25.5	27.5	21.5	25.0	22.0
3	---	---	15.0	10.0	25.0	18.0	29.0	24.0	26.5	22.5	25.0	22.0
4	---	---	---	---	23.5	20.0	29.0	25.0	23.5	21.5	26.5	22.5
5	---	---	---	---	25.5	21.5	26.5	25.0	25.5	19.5	29.0	22.5
6	---	---	---	---	30.0	21.5	30.0	24.0	27.5	19.5	25.5	23.5
7	---	---	15.0	13.5	28.0	22.5	30.5	24.0	28.5	21.0	27.5	23.0
8	---	---	18.5	13.0	23.0	21.5	29.0	25.0	29.0	22.0	29.0	23.5
9	---	---	16.5	13.0	21.5	20.5	30.0	25.5	29.5	22.5	27.0	24.5
10	---	---	18.0	15.0	22.5	20.5	29.0	25.0	29.0	23.5	27.5	23.5
11	---	---	---	---	21.5	20.5	27.0	23.5	28.5	23.0	27.0	24.0
12	---	---	---	---	23.5	21.5	28.0	23.5	27.5	20.5	26.0	22.5
13	---	---	---	---	26.0	23.0	27.0	24.0	28.5	21.0	24.5	21.0
14	---	---	---	---	25.0	24.0	27.5	24.0	28.0	22.5	27.0	20.0
15	---	---	---	---	26.0	23.0	26.0	24.0	25.5	22.5	26.0	21.0
16	14.0	12.0	---	---	26.0	23.0	26.5	23.0	27.0	21.5	---	---
17	15.5	12.5	---	---	27.0	23.0	27.0	23.5	28.0	20.0	---	---
18	16.5	13.5	---	---	27.5	22.5	28.5	23.0	29.0	20.0	---	---
19	17.0	12.5	---	---	28.5	24.0	25.0	23.0	27.5	22.0	---	---
20	18.0	13.5	---	---	29.0	25.5	26.5	22.0	28.0	22.5	---	---
21	16.0	14.5	22.0	18.5	28.0	26.0	27.0	23.0	29.0	23.0	---	---
22	16.5	12.5	22.0	18.0	29.5	24.0	27.5	23.0	28.5	22.5	---	---
23	18.0	13.0	22.5	17.5	29.5	24.5	28.0	23.0	26.0	20.5	---	---
24	15.5	12.5	23.5	18.0	29.0	25.0	27.5	23.0	26.5	17.5	---	---
25	16.5	11.5	19.5	17.5	30.0	24.5	29.0	24.0	27.0	20.0	---	---
26	17.5	12.0	17.0	16.0	29.5	24.5	27.0	24.5	27.5	20.0	---	---
27	13.5	11.5	19.0	16.0	31.5	25.0	27.0	23.0	25.5	21.0	---	---
28	13.5	11.5	22.0	15.5	30.0	27.5	25.5	22.0	25.5	20.0	---	---
29	13.0	10.5	24.0	17.0	30.0	27.5	28.0	22.0	28.0	20.0	---	---
30	16.0	10.0	19.0	17.0	30.0	27.5	23.0	22.0	28.5	21.0	24.0	22.0
31	---	---	20.5	18.0	---	---	25.5	20.5	25.5	21.5	---	---
MONTH	---	---	---	---	31.5	17.0	30.5	20.5	29.5	17.5	---	---

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	685	30	55	1010	26	71	10500	190	5390
2	715	25	48	942	23	58	8000	165	3560
3	576	20	31	1090	19	56	6200	138	2310
4	404	15	16	1020	15	41	5400	122	1780
5	339	10	9.2	1180	11	35	5190	110	1540
6	331	10	8.9	1190	14	45	4190	99	1120
7	325	10	8.8	1050	20	57	3270	88	777
8	414	10	11	992	22	59	2630	68	483
9	342	10	9.2	920	24	60	2250	48	292
10	499	10	13	1150	25	78	1660	33	148
11	444	10	12	1030	25	70	1570	26	110
12	627	28	47	1070	25	72	1950	25	132
13	801	30	65	1110	25	75	3540	27	258
14	785	25	53	1110	25	75	5260	33	469
15	1100	27	80	1230	25	83	4500	32	389
16	2230	55	331	1130	25	76	4000	31	335
17	2650	62	444	956	25	65	3600	30	292
18	1930	46	240	992	25	67	3420	28	259
19	1430	37	143	974	25	66	4260	28	322
20	1200	32	104	1450	42	164	6000	40	648
21	1150	29	90	1500	16	65	5600	38	575
22	944	27	69	2790	29	247	5000	31	419
23	858	25	58	2930	16	127	4500	27	328
24	813	23	50	2180	10	59	4000	25	270
25	803	20	43	1800	10	49	3500	25	236
26	828	20	45	1500	10	41	3000	25	203
27	740	20	40	1300	10	35	2600	25	176
28	737	20	40	2000	13	70	2300	27	168
29	753	20	41	4450	34	443	2000	29	157
30	760	20	41	8970	116	2810	1850	32	160
31	912	22	54	--	--	--	1700	32	147
TOTAL	27125	--	2300.1	51016	--	5339	123440	--	23453

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1500	32	130	560	11	17	18600	98	4920
2	1400	32	121	540	10	15	13900	81	3040
3	1400	32	121	520	10	14	10200	68	1870
4	1550	33	138	660	13	23	6440	59	1030
5	2680	46	333	12600	33	1230	5850	57	900
6	3040	33	271	16700	139	6270	4840	57	745
7	2700	32	233	16300	270	11900	5540	58	868
8	2300	29	180	13700	253	9360	5920	59	943
9	1900	27	139	11000	206	6120	5780	60	936
10	1600	25	108	7400	164	3280	5080	60	823
11	1400	23	87	5600	128	1940	4350	51	599
12	1300	21	74	5000	99	1340	4190	48	543
13	1200	18	58	4800	78	1010	6960	88	1650
14	1100	13	39	4500	61	741	13300	178	6390
15	1000	13	35	4100	45	498	18800	275	14000
16	900	13	32	3700	34	340	22200	260	15600
17	800	14	30	3500	32	302	21200	336	19200
18	800	15	32	6360	59	1040	15800	319	13600
19	760	15	31	13400	138	5250	11800	260	8280
20	740	16	32	28000	268	20300	11600	201	6300
21	720	16	31	28400	258	19800	10800	146	4260
22	700	16	30	38900	430	45200	10200	103	2840
23	700	15	28	29900	368	29700	8560	68	1570
24	700	15	28	28600	328	25300	6640	55	986
25	700	14	26	26400	273	19500	5360	47	680
26	680	14	26	27900	219	16500	4510	49	597
27	660	13	23	27800	167	12500	3940	68	723
28	640	13	22	23900	125	8070	3540	64	612
29	620	12	20	--	--	--	3100	27	226
30	600	12	19	--	--	--	2650	33	236
31	580	11	17	--	--	--	2630	41	291
TOTAL	37370	--	2494	398740	--	247560	274280	--	115258

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2460	65	432	1190	18	58	3040	102	837
2	2710	95	695	884	23	55	4100	122	1350
3	2650	64	458	1030	30	83	7800	166	3500
4	2680	32	232	1030	27	75	13700	268	9910
5	2550	31	213	1010	17	46	10700	210	6070
6	2440	32	211	3360	33	421	10200	213	5870
7	2300	32	199	19700	178	9470	6060	182	2980
8	2100	32	181	21600	332	19400	4610	166	2070
9	1980	31	159	19900	333	17900	3570	162	1560
10	1800	31	151	18000	254	12300	4060	160	1750
11	1700	30	138	11800	147	4680	3330	148	1330
12	1600	30	130	7160	90	1740	2900	114	893
13	1500	30	122	5820	87	1370	2570	86	597
14	2700	30	219	4740	85	1090	2050	76	421
15	2300	47	292	4190	78	882	1680	75	340
16	1900	51	262	3390	70	641	1780	60	288
17	2500	50	338	2630	62	440	1640	36	159
18	3000	50	405	2280	54	332	1390	25	94
19	2300	50	311	2000	45	243	1190	24	77
20	1900	52	267	1730	36	168	1030	23	64
21	1700	50	230	1500	28	113	798	23	50
22	1500	50	203	1280	22	76	750	22	45
23	1300	43	151	1320	20	71	642	22	38
24	1050	33	94	1500	20	81	572	22	34
25	1200	27	87	3070	35	316	586	22	35
26	1110	26	78	9240	100	2600	492	22	29
27	992	26	70	15300	185	7640	750	26	60
28	1520	23	94	13900	187	7020	3180	87	747
29	920	17	42	8120	157	3440	3900	99	1040
30	992	17	46	5680	129	1980	2200	63	374
31	--	--	--	3750	108	1090	--	--	--
TOTAL	57274	--	6510	198104	--	95821	101270	--	42612

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1300	41	144	560	26	39	220	35	21
2	1100	32	95	560	27	41	340	35	32
3	1000	28	76	500	38	51	360	35	34
4	1000	25	68	420	38	43	390	35	37
5	900	24	58	390	38	40	520	35	49
6	700	23	43	370	30	30	580	35	55
7	500	23	31	330	28	25	660	35	62
8	400	23	25	300	27	22	860	35	81
9	440	23	27	270	26	19	1000	35	95
10	560	25	38	240	25	16	1200	35	113
11	860	25	58	330	25	22	840	35	79
12	1300	26	91	400	25	27	660	35	62
13	1600	48	207	520	25	35	540	35	51
14	1800	79	384	440	25	30	420	34	39
15	2100	72	408	410	25	28	380	24	25
16	1800	48	233	380	25	26	360	22	21
17	1300	43	151	350	25	24	340	22	20
18	950	43	110	310	25	21	330	22	20
19	820	45	100	280	25	19	380	23	24
20	1300	46	161	250	25	17	440	40	48
21	1100	55	163	260	25	18	500	39	53
22	900	48	117	270	25	18	600	26	42
23	700	45	85	250	25	17	1000	45	122
24	640	39	67	230	25	16	700	42	79
25	800	27	58	300	25	20	560	33	50
26	950	22	56	370	30	30	500	32	43
27	1100	47	140	400	37	40	600	33	53
28	950	42	108	300	35	28	620	32	54
29	800	34	73	230	35	22	1100	28	83
30	700	28	53	200	35	19	1900	64	328
31	640	26	45	170	35	16	--	--	--
TOTAL	31010	--	3473	10590	--	819	18900	--	1875

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	1321119
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	547514.1

See page 238 for particle-size distribution of suspended sediment.

04194022 MAUMEE RIVER AT TOLEDO OVERSEAS TERMINAL DOCK, AT TOLEDO, OHIO

LOCATION.--Lat 41°41'06", long 83°28'35", Lucas County, at Toledo Overseas Terminal dock at Toledo, about 1 mile upstream from the mouth.

PERIOD OF RECORD.--Chemical analyses: October 1962 to September 1971.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)
OCT.											
07...	0845	--	170	0	71	36	--	--	--	32	200
14...	0830	--	212	0	84	48	--	--	--	25	250
21...	--	43	254	0	110	50	11	1.3	468	36	290
28...	--	--	229	0	100	52	--	--	--	32	270
NOV.											
04...	0845	--	220	0	110	64	--	--	--	25	290
18...	0900	--	212	0	110	50	--	--	--	23	280
25...	0920	42	242	0	120	56	25	1.5	530	38	310
DEC.											
02...	0830	25	230	0	110	38	37	1.0	490	39	320
09...	0900	--	177	0	94	38	--	--	--	39	270
16...	0900	--	185	5	89	40	--	--	--	27	280
23...	0845	--	204	0	100	40	--	--	--	--	300
JAN.											
06...	0900	--	190	0	82	42	--	--	--	15	260
13...	0900	31	212	8	120	48	44	1.5	544	12	330
FEB.											
17...	0900	22	93	0	44	30	10	1.5	226	32	120
MAR.											
03...	0830	--	110	0	48	16	--	--	--	96	160
10...	0900	--	150	0	62	22	--	--	--	42	200
17...	0815	--	132	4	64	24	--	--	--	135	220
24...	0815	--	168	0	73	24	--	--	--	49	250
31...	0830	26	190	0	84	28	41	.52	406	27	280
APR.											
07...	0800	--	201	6	91	31	--	--	--	27	300
14...	0830	--	203	0	97	32	--	--	--	37	290
21...	0815	--	166	4	100	38	--	--	--	29	270
28...	0815	25	206	0	100	40	23	1.2	446	31	290
MAY											
12...	0830	--	146	0	71	24	--	--	--	81	250
19...	0830	--	157	0	76	28	--	--	--	39	260
26...	0830	24	179	0	85	30	55	.69	422	40	280
JUNE											
02...	0800	--	140	0	68	26	--	--	--	--	240
09...	0830	--	156	0	70	28	--	--	--	--	250
16...	0830	--	166	0	70	26	--	--	--	--	260
23...	0830	17	175	0	76	29	36	1.6	338	--	260
JULY											
07...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	180	0	83	38	--	--	--	21	260
21...	--	28	172	0	110	45	18	1.1	380	30	270
AUG.											
04...	0845	--	152	0	75	40	--	--	--	13	210
11...	0845	--	164	0	74	42	--	--	--	16	210
18...	0900	28	158	0	75	42	13	2.1	330	17	220
25...	--	--	154	0	66	38	--	--	--	18	190
SEP.											
01...	--	--	150	0	63	36	--	--	--	16	190
08...	--	--	146	0	60	35	--	--	--	12	180
15...	--	--	--	--	--	--	--	--	--	14	--
22...	--	--	152	0	70	40	--	--	--	12	200
30...	--	43	182	0	98	60	10	1.2	410	12	250

04194022 MAUMEE RIVER AT TOLEDO OVERSEAS TERMINAL DOCK, AT TOLEDO, OHIO--Continued

REMARKS.--Determinations of suspended solids and dissolved oxygen (DO) furnished by the city of Toledo, Division of Sewage Disposal. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	TURBIDITY (JTU)
OCT.										
07...	60	495	8.1	17.0	8	5.6	58	1.8	--	25
14...	76	624	7.3	19.0	10	4.0	42	2.7	--	15
21...	82	722	7.7	15.5	25	6.8	67	2.8	.09	15
28...	82	689	7.8	15.5	15	5.3	52	3.4	--	4
NOV.										
04...	110	750	8.0	14.5	15	4.6	45	3.0	--	8
18...	110	683	8.2	9.0	15	7.3	63	6.1	--	3
25...	110	752	7.5	4.0	30	10.4	79	5.2	.10	10
DEC.										
02...	130	680	7.4	5.5	20	11.2	89	4.9	.07	30
09...	120	613	7.8	5.0	20	10.6	83	4.5	--	30
16...	120	624	8.3	3.5	20	11.7	88	4.8	--	25
23...	130	666	7.5	3.5	20	11.9	89	3.7	--	35
JAN.										
06...	100	599	8.0	.0	15	12.6	86	3.3	--	10
13...	140	728	8.4	1.0	20	11.8	83	3.5	.11	4
FEB.										
17...	44	358	7.2	3.0	50	9.3	69	6.7	.07	35
MAR.										
03...	70	366	7.2	3.5	35	11.7	88	4.1	--	85
10...	77	457	7.8	1.0	25	12.0	84	3.3	--	35
17...	86	482	8.3	4.5	20	10.9	84	3.3	--	105
24...	110	528	8.1	4.5	15	11.7	90	2.8	--	60
31...	120	582	7.7	5.5	30	11.3	90	1.6	.11	30
APR.										
07...	120	613	8.3	6.5	15	12.4	100	8.7	--	10
14...	120	612	7.5	11.0	15	13.2	119	5.5	--	4
21...	130	604	8.3	14.5	15	8.0	78	6.0	--	10
28...	120	652	7.2	14.5	10	6.1	59	1.5	.14	10
MAY										
12...	130	530	7.2	15.5	35	7.6	75	3.4	--	70
19...	130	558	7.2	19.0	25	5.4	57	1.5	--	30
26...	130	594	7.1	19.0	30	5.9	63	4.9	.13	25
JUNE										
02...	120	487	8.2	19.0	35	5.7	61	5.3	--	100
09...	120	544	7.3	21.5	20	5.1	57	2.4	--	50
16...	120	540	7.3	24.0	20	5.3	62	--	--	45
23...	120	546	7.2	26.0	12	3.1	38	2.3	.15	2
JULY										
07...	--	--	--	26.5	--	4.7	58	4.5	--	--
14...	110	558	7.2	26.0	15	5.4	66	3.0	--	8
21...	130	586	8.2	26.0	13	3.4	41	2.6	.11	25
AUG.										
04...	86	526	8.1	23.5	15	2.8	32	1.5	--	15
11...	76	522	7.2	26.0	10	2.6	32	--	--	10
18...	90	533	8.0	25.5	8	3.9	47	3.6	.17	10
25...	64	484	7.2	24.5	10	.5	6	--	--	10
SEP.										
01...	67	465	7.2	24.0	5	.9	10	--	--	9
08...	60	453	7.2	24.0	10	.5	6	--	--	8
15...	--	--	--	24.5	--	1.2	14	--	--	--
22...	76	505	7.1	21.0	10	1.3	14	--	--	10
30...	100	657	7.4	21.5	10	.3	3	--	.11	10

04194023 MAUMEE RIVER AT MOUTH, AT U.S. COAST GUARD STATION AT TOLEDO, OHIO

LOCATION.--Lat 41°41'36", long 83°28'20", on left bank at U.S. Coast Guard Station 200 ft downstream from entrance of channel to Bay View Park Yacht Club, across the river from C. and O. docks, and 2,500 ft downstream from Toledo Sewage Disposal plant.

DRAINAGE AREA.--6,608 sq mi.

PERIOD OF RECORD.--Chemical analyses: February 1967 to September 1971.
Water temperatures: February 1967 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 910 micromhos Jan. 23, Feb. 5, 6; minimum, 260 micromhos Oct. 10.
Water temperatures: Maximum, 29.0°C June 30; minimum, freezing point Jan. 27 to Feb. 2, Feb. 5-15, 21, 22, 24.
Period of record:
Specific conductance (1967-69, 1970-71): Maximum, 940 micromhos Nov. 5, 1967; minimum, 210 micromhos Dec. 23, 1967.
Dissolved oxygen (1967-68): Maximum, 14.4 mg/l Sept. 4, 1967; minimum, 0.0 mg/l on many days during June to September 1967.
Water temperatures (1967-69, 1970-71): Maximum, 30.0°C Aug. 24, 1968; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since February 1967. Maximum recorded specific conductance value of 980 micromhos occurred Jan. 31, 1970. Maximum recorded dissolved oxygen concentrations of 15.0 mg/l occurred Aug. 8, 1970, Apr. 9-13, 1971. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice a year to further define the quality of water. Considerable industrial pollution from upstream and Toledo sources and from sewage disposal plant. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)
OCT.											
12...	1020	156	0	62	39	.7	17	312	190	62	522
19...	1000	216	0	96	54	1.0	22	446	260	82	720
NOV.											
09...	1030	183	6	100	53	.8	46	440	250	90	722
23...	1010	212	11	120	62	.6	42	518	310	118	814
DEC.											
10...	1000	170	0	99	37	.4	84	432	260	120	647
21...	1045	216	0	110	41	.3	73	478	310	133	711
JAN.											
18...	1045	199	6	100	55	.6	40	464	310	140	775
25...	1330	245	0	120	53	1.1	42	516	350	150	845
FEB.											
08...	1000	161	0	80	49	.8	17	354	220	88	625
24...	1500	80	0	36	19	.5	17	166	110	44	300
MAR.											
01...	1000	104	0	48	23	.4	25	262	150	65	375
29...	1000	176	0	93	32	.4	42	420	270	120	597
APR.											
05...	1000	188	0	86	25	.3	34	372	280	120	608
12...	1100	192	0	100	41	.4	33	366	290	130	657
MAY											
10...	1035	142	0	78	29	.4	58	367	240	120	558
24...	0930	157	0	79	32	.4	58	381	270	140	604
JUNE											
07...	0930	178	0	89	30	.4	64	388	290	140	638
14...	0930	156	0	69	28	.4	54	314	240	110	558
JULY											
12...	1315	156	0	74	36	.4	20	318	240	110	534
28...	1015	165	3	100	50	.6	16	388	260	120	646
AUG.											
09...	0945	150	0	84	50	.6	19	336	240	120	605
23...	1100	130	0	56	35	.4	11	248	180	74	442
SEP.											
07...	0945	130	0	55	33	.4	12	262	170	64	452
27...	0945	146	0	78	55	.6	16	350	200	80	588

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.								
06...	12	0	1	1	0	1	.8	20
JUNE								
15...	105	--	--	--	--	--	.5	--

04194023 MAUMEE RIVER AT MOUTH, AT U.S. COAST GUARD STATION AT TOLEDO, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	640	420	800	770	800	720	---	---	610	470	460	340
2	680	340	830	680	750	710	---	---	570	490	400	370
3	640	340	840	810	750	670	---	---	600	520	450	370
4	590	400	830	730	720	460	---	---	740	540	450	390
5	620	380	840	690	690	620	---	---	910	530	550	430
6	620	360	840	790	680	570	---	---	910	770	490	430
7	560	360	810	420	670	620	---	---	800	540	560	430
8	520	390	740	550	700	620	---	---	660	520	570	420
9	570	390	760	560	630	620	---	---	670	510	620	460
10	580	260	780	740	650	560	---	---	620	400	530	480
11	490	320	780	700	570	520	---	---	550	400	620	500
12	550	430	760	630	590	490	---	---	490	390	540	470
13	560	450	740	590	680	580	---	---	440	360	580	490
14	640	480	720	470	810	620	820	740	450	350	630	490
15	600	480	740	650	690	600	830	750	460	400	610	530
16	730	580	750	720	640	550	---	---	490	410	610	520
17	800	680	750	600	720	610	---	---	640	420	540	320
18	820	660	750	670	740	690	840	740	650	430	630	470
19	780	580	700	670	750	700	870	770	530	450	620	470
20	760	580	740	510	750	720	860	700	540	440	620	430
21	750	700	740	500	740	700	900	740	470	350	520	430
22	760	720	840	540	740	680	900	830	400	320	540	420
23	760	700	850	790	820	720	910	830	360	280	650	530
24	740	660	820	500	820	640	900	760	380	290	570	530
25	690	580	840	600	740	660	840	820	440	320	570	500
26	680	600	880	640	770	720	880	820	450	310	540	510
27	700	580	850	660	760	720	850	470	540	340	670	530
28	700	530	740	640	800	710	610	450	640	340	680	540
29	750	670	820	640	800	710	680	560	---	---	620	560
30	740	680	800	740	---	---	820	620	---	---	580	540
31	780	730	---	---	---	---	700	460	---	---	760	540
MONTH	820	260	880	420	820	460	---	---	910	280	760	320

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	580	500	760	540	620	560	600	480	730	500	410	300
2	530	470	780	560	590	480	530	400	700	510	520	350
3	520	460	720	640	590	500	530	400	610	500	530	400
4	520	460	800	680	590	520	570	480	600	460	550	380
5	600	420	810	640	660	590	600	520	580	480	480	380
6	480	400	740	640	---	---	550	390	660	540	450	330
7	540	460	740	680	690	610	540	420	650	590	460	330
8	620	520	750	650	620	560	570	430	680	560	460	350
9	580	540	680	530	600	540	580	420	670	500	480	310
10	600	530	600	470	560	540	510	440	680	490	530	340
11	780	600	610	540	580	540	520	420	680	280	570	500
12	660	540	600	520	620	520	560	440	600	400	540	450
13	580	500	580	530	600	500	690	490	620	560	580	470
14	680	570	580	550	540	520	670	550	610	440	610	530
15	780	660	610	540	530	500	700	450	520	390	550	420
16	700	610	590	560	520	480	700	600	460	380	590	350
17	690	640	590	560	520	500	700	480	650	440	540	380
18	670	600	610	560	560	500	650	470	580	430	510	360
19	630	580	620	540	580	540	640	520	640	530	600	350
20	640	600	620	540	620	460	680	580	680	400	590	410
21	660	610	610	560	600	420	720	570	570	350	530	340
22	670	620	590	550	520	420	750	580	500	380	550	440
23	740	660	610	500	570	480	750	570	500	320	630	490
24	790	520	620	540	620	430	680	540	510	290	580	480
25	670	540	620	450	640	480	640	520	560	360	630	510
26	690	600	650	440	520	410	680	540	530	350	570	520
27	720	550	670	630	560	440	720	590	510	360	640	550
28	740	550	710	660	590	400	790	680	500	410	710	580
29	730	390	740	690	600	330	780	680	530	380	630	500
30	660	510	740	610	590	490	740	630	530	350	610	490
31	---	---	680	550	---	---	740	670	420	280	---	---
MONTH	790	390	810	440	690	330	790	390	730	280	710	300
YEAR	910	260										

04194023 MAUMEE RIVER AT MOUTH, AT U.S. COAST GUARD STATION AT TOLEDO, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	8.1	7.9	7.6	7.4
2	---	---	---	---	---	---	---	---	8.1	7.6	7.7	7.5
3	---	---	---	---	---	---	---	---	7.9	7.0	7.8	7.7
4	---	---	---	---	---	---	---	---	7.8	7.2	7.9	7.7
5	---	---	---	---	---	---	---	---	7.9	7.4	7.8	7.5
6	---	---	---	---	---	---	---	---	7.8	6.8	7.8	7.6
7	---	---	---	---	---	---	---	---	7.5	6.8	8.0	7.6
8	---	---	---	---	---	---	---	---	7.4	7.0	8.0	7.7
9	---	---	---	---	---	---	---	---	7.5	7.1	8.0	7.5
10	---	---	---	---	---	---	---	---	7.4	7.0	7.9	7.6
11	---	---	---	---	---	---	---	---	7.4	6.9	7.9	7.5
12	---	---	---	---	---	---	---	---	6.9	5.9	7.8	7.7
13	---	---	---	---	---	---	---	---	7.0	6.8	7.8	7.6
14	---	---	---	---	---	---	7.8	7.2	7.1	6.6	7.8	7.5
15	---	---	---	---	---	---	7.2	7.1	6.9	6.2	8.0	7.7
16	---	---	---	---	---	---	---	---	7.3	6.1	8.0	7.8
17	---	---	---	---	---	---	---	---	7.3	7.2	7.9	7.7
18	---	---	---	---	---	---	7.6	7.1	7.4	7.2	7.8	7.6
19	---	---	---	---	---	---	7.8	7.4	7.4	7.2	7.9	7.7
20	---	---	---	---	---	---	7.9	7.3	7.5	7.2	7.9	7.6
21	---	---	---	---	---	---	8.0	7.6	7.6	7.4	7.9	7.6
22	---	---	---	---	---	---	7.7	7.3	7.8	7.6	8.0	7.6
23	---	---	---	---	---	---	8.0	7.4	7.8	7.5	8.1	7.9
24	---	---	---	---	---	---	8.0	7.2	7.6	7.4	8.2	8.0
25	---	---	---	---	---	---	8.0	7.3	7.5	7.2	8.2	8.0
26	---	---	---	---	---	---	8.2	7.6	7.4	7.2	8.2	8.1
27	---	---	---	---	---	---	8.2	8.0	7.8	7.2	8.2	8.0
28	---	---	---	---	---	---	8.0	7.9	7.8	7.5	8.1	7.8
29	---	---	---	---	---	---	8.1	7.6	---	---	8.2	7.9
30	---	---	---	---	---	---	8.0	7.6	---	---	8.2	8.0
31	---	---	---	---	---	---	8.1	7.8	---	---	8.2	7.9
MONTH	---	---	---	---	---	---	---	---	8.1	5.9	8.2	7.4

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.2	8.0	7.7	7.5	7.4	7.0	7.3	7.2	7.1	7.0	7.3	7.3
2	8.4	8.1	7.7	7.4	7.4	6.9	7.3	7.1	7.1	7.0	7.4	7.3
3	8.5	8.2	7.6	7.4	7.0	6.9	7.3	7.1	7.1	6.9	7.4	7.3
4	8.3	8.1	7.6	7.3	7.0	6.8	7.2	7.1	7.1	7.0	7.4	7.3
5	8.5	8.3	7.6	7.2	7.2	6.9	7.3	7.0	7.1	7.0	7.4	7.3
6	8.5	8.3	7.5	7.3	---	---	7.3	7.0	7.2	6.9	7.4	7.3
7	8.5	8.3	8.4	7.4	7.4	7.2	7.2	7.1	7.1	6.7	7.5	7.3
8	8.8	8.2	8.3	7.4	7.4	7.2	7.2	6.9	7.1	7.0	7.5	7.3
9	9.0	8.5	7.8	7.3	7.4	7.2	7.3	7.2	7.3	7.1	7.4	7.3
10	9.0	8.7	7.5	7.3	7.3	7.1	7.3	7.1	7.3	7.2	7.5	7.3
11	9.0	8.7	7.4	7.2	7.2	7.0	7.2	7.1	7.3	7.2	7.4	7.3
12	9.0	8.7	7.4	7.2	7.1	6.9	7.2	7.1	7.2	7.2	7.4	7.3
13	9.1	8.9	7.6	7.2	7.2	6.9	7.2	7.1	7.4	7.2	7.4	7.3
14	8.9	8.6	7.6	7.3	7.3	7.1	7.2	7.1	7.5	7.2	7.4	7.3
15	8.6	8.1	7.5	7.2	7.6	7.2	7.2	7.1	7.4	7.3	7.4	7.3
16	8.7	8.3	7.3	7.2	7.6	7.3	7.2	7.0	7.5	7.3	7.3	7.2
17	8.7	8.2	7.4	7.1	7.9	7.5	7.2	7.0	7.5	7.4	7.3	7.3
18	8.7	8.4	7.2	7.0	7.8	7.3	7.2	7.0	7.7	7.5	7.3	7.2
19	8.8	8.1	7.3	6.9	7.4	7.2	7.1	7.0	7.6	7.5	7.3	7.2
20	8.5	8.1	7.1	6.9	7.4	7.2	7.2	6.9	7.6	7.4	7.4	7.2
21	8.3	7.8	7.2	6.9	7.4	7.2	7.1	7.0	7.5	7.3	7.3	7.3
22	7.9	7.7	7.5	7.0	7.3	7.2	7.2	7.0	7.4	7.3	7.3	7.3
23	7.7	7.5	7.6	7.0	7.4	7.2	7.1	7.0	7.4	7.3	7.3	7.3
24	8.1	7.6	7.3	7.1	7.3	7.2	7.2	7.0	7.4	7.3	7.3	7.3
25	8.0	7.7	7.3	7.0	7.4	7.2	7.1	7.0	7.5	7.3	7.3	7.3
26	7.9	7.6	7.4	7.2	7.3	7.2	7.1	6.9	7.4	7.3	7.4	7.2
27	8.1	7.5	7.7	7.2	7.4	7.2	7.1	6.9	7.4	7.3	7.4	7.3
28	7.9	7.4	7.5	7.2	7.4	7.2	7.2	7.0	7.4	7.3	7.5	7.3
29	8.0	7.6	7.3	7.0	7.4	7.2	7.2	7.0	7.4	7.3	7.5	7.3
30	7.8	7.5	7.1	6.8	7.3	7.2	7.1	7.0	7.4	7.3	7.4	7.3
31	---	---	7.0	6.8	---	---	7.1	7.0	7.4	7.3	---	---
MONTH	9.1	7.4	8.4	6.8	7.9	6.8	7.3	6.9	7.7	6.7	7.5	7.2

04194023 MAUMEE RIVER AT MOUTH, AT U.S. COAST GUARD STATION AT TOLEDO, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2.8	0.9	4.5	3.2	---	---	---	---	13.7	12.1	13.0	12.0
2	8.9	1.6	7.0	3.6	---	---	---	---	13.8	12.7	12.4	12.2
3	9.4	4.9	7.0	4.9	---	---	---	---	13.3	11.7	12.4	12.2
4	7.1	5.1	5.7	5.0	---	---	---	---	13.1	10.2	12.5	12.1
5	7.8	6.1	7.4	4.7	---	---	---	---	12.5	11.3	12.7	11.9
6	9.1	6.0	9.2	6.0	---	---	---	---	12.7	12.0	12.7	12.3
7	7.6	5.2	10.3	7.0	---	---	---	---	12.8	11.4	13.0	12.1
8	6.8	5.4	9.5	6.2	---	---	---	---	11.5	10.7	12.9	12.4
9	6.8	5.0	8.6	6.1	---	---	---	---	10.9	10.4	12.7	12.1
10	6.2	5.0	8.8	5.4	---	---	---	---	10.4	9.5	12.7	12.2
11	9.8	4.7	7.7	6.3	---	---	---	---	9.5	9.0	13.0	12.4
12	6.8	3.6	9.1	6.1	---	---	---	---	9.2	8.3	12.8	12.4
13	7.2	1.5	9.0	6.2	---	---	---	---	8.7	8.3	12.6	12.3
14	7.8	2.6	11.0	7.0	---	---	14.7	10.4	8.7	7.8	12.5	11.7
15	4.2	2.4	11.2	7.0	---	---	14.7	13.7	8.5	7.5	12.7	11.9
16	4.5	2.0	10.9	8.5	---	---	---	---	9.0	7.7	12.5	12.1
17	4.9	2.1	11.0	9.9	---	---	---	---	9.1	8.5	12.4	11.7
18	5.2	3.7	10.2	9.0	---	---	11.5	10.4	8.8	8.1	11.8	11.1
19	6.1	3.0	10.6	8.7	---	---	11.6	9.5	10.5	7.9	12.2	11.1
20	5.1	3.5	13.1	10.1	---	---	11.5	10.2	10.8	9.8	12.4	11.5
21	3.9	2.8	13.8	12.7	---	---	12.3	10.0	10.6	9.9	12.2	11.5
22	4.3	2.9	12.8	11.1	---	---	12.3	10.9	10.9	9.9	12.1	11.4
23	4.8	2.5	14.0	12.3	---	---	12.3	10.7	11.2	10.0	12.2	11.5
24	6.4	3.5	---	---	---	---	12.3	10.8	11.5	10.9	12.0	11.7
25	7.0	4.8	---	---	---	---	11.8	10.6	11.5	10.9	12.1	11.3
26	9.5	4.8	---	---	---	---	12.4	10.0	11.6	10.7	12.1	11.4
27	10.3	6.4	---	---	---	---	13.3	12.1	12.4	10.9	12.1	11.4
28	10.2	3.6	---	---	---	---	13.6	12.5	12.7	11.9	12.2	11.3
29	5.2	3.4	---	---	---	---	13.6	12.1	---	---	12.0	11.3
30	5.0	3.2	---	---	---	---	13.0	11.6	---	---	12.0	11.2
31	4.5	3.3	---	---	---	---	13.6	11.8	---	---	11.5	10.5
MONTH	10.3	0.9	---	---	---	---	---	---	13.8	7.5	13.0	10.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.3*	10.5	5.2	2.4	---	---	2.8	1.9	---	---	6.0	2.0
2	11.7	10.6	2.9	1.5	---	---	3.7	1.9	---	---	3.2	0.8
3	11.4	10.4	2.6	0.6	---	---	4.3	2.6	---	---	1.5	0.4
4	10.5	9.6	2.7	0.2	---	---	3.6	1.9	---	---	1.4	0.5
5	11.8	9.6	2.8	1.1	---	---	3.3	2.3	---	---	1.1	0.3
6	11.8	10.7	---	---	---	---	3.4	2.1	---	---	0.6	0.3
7	11.5	10.8	---	---	---	---	2.7	1.8	---	---	2.9	0.3
8	12.3	10.2	---	---	---	---	2.6	1.8	---	---	2.3	0.4
9	15.0	12.3	6.1	4.2	---	---	3.6	1.9	---	---	3.3	0.5
10	15.0	11.6	5.9	4.7	---	---	3.4	1.9	---	---	1.9	0.3
11	15.0	11.8	6.1	5.1	---	---	3.5	2.5	---	---	1.4	0.3
12	15.0	15.0	6.3	4.6	---	---	5.9	2.0	---	---	3.1	0.3
13	15.0	11.8	6.7	4.5	---	---	4.2	2.2	---	---	1.4	0.3
14	12.3	10.3	---	---	---	---	4.0	1.1	---	---	0.3	0.3
15	12.0	9.8	---	---	4.6	2.4	3.6	0.8	---	---	2.4	0.0
16	13.3	10.0	5.6	3.8	6.9	2.9	2.5	0.3	---	---	6.3	0.0
17	11.8	8.5	---	---	8.2	1.8	4.5	0.3	---	---	4.1	0.0
18	9.8	8.6	---	---	7.6	2.9	4.9	1.6	---	---	4.2	0.0
19	9.3	6.5	---	---	4.6	1.8	6.7	0.7	---	---	1.9	0.0
20	8.0	5.9	---	---	4.0	1.9	2.9	0.5	3.7	1.3	2.9	0.0
21	7.7	4.9	---	---	6.0	2.5	1.7	0.4	3.4	0.9	1.4	0.0
22	5.6	2.6	---	---	5.6	2.0	2.8	1.0	2.5	0.4	1.8	0.0
23	3.2	1.7	---	---	3.6	1.1	2.6	1.0	6.8	1.0	0.0	0.0
24	7.7	2.2	---	---	5.0	1.7	2.4	0.9	6.0	1.6	0.9	0.0
25	7.3	5.3	---	---	3.4	1.5	2.5	0.7	2.6	1.8	0.0	0.0
26	5.4	3.9	---	---	5.0	1.6	3.0	0.6	2.4	0.4	0.0	0.0
27	7.8	2.7	---	---	2.8	1.6	2.0	0.8	2.2	0.5	2.8	0.0
28	6.6	2.1	---	---	3.5	1.2	2.9	0.7	0.6	0.3	---	0.0
29	7.5	3.0	---	---	3.8	1.7	2.6	0.7	0.4	0.3	3.0	0.7
30	6.0	4.1	---	---	3.3	1.8	1.8	0.6	5.0	0.3	5.1	0.6
31	---	---	---	---	---	---	---	---	5.7	2.8	---	---
MONTH	15.0	1.7	---	---	---	---	6.7	0.3	---	---	6.3	0.0

04194023 MAUMEE RIVER AT MOUTH, AT U.S. COAST GUARD STATION AT TOLEDO, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	16.5	15.5	15.0	6.5	2.5	---	---	0.5	0.0	4.0	1.0
2	18.5	15.5	15.0	12.0	6.5	5.5	---	---	1.0	0.0	4.5	1.0
3	18.0	16.0	15.0	13.5	9.5	6.5	---	---	1.5	1.0	4.5	2.5
4	17.0	14.5	14.0	13.5	8.5	5.0	---	---	3.0	0.5	5.0	2.0
5	17.0	15.0	14.0	12.0	7.5	6.0	---	---	3.0	0.0	5.0	3.0
6	16.5	14.5	13.5	12.0	6.0	3.0	---	---	1.0	0.0	5.0	3.0
7	17.0	15.5	13.0	10.0	5.5	2.5	---	---	1.0	0.0	5.0	2.0
8	18.0	16.0	11.5	10.0	6.0	3.0	---	---	0.5	0.0	5.0	1.5
9	19.5	16.5	13.5	10.5	4.5	2.5	---	---	1.0	0.0	5.0	2.0
10	19.0	16.5	14.0	13.0	5.0	3.0	---	---	2.0	0.0	3.5	1.5
11	16.5	15.5	13.0	11.5	3.0	2.5	---	---	2.0	0.0	5.0	1.5
12	17.0	16.5	13.0	11.0	3.0	2.0	---	---	1.5	0.0	4.0	2.0
13	19.0	17.0	11.5	10.5	4.5	2.5	---	---	1.0	0.0	3.5	1.5
14	19.0	18.0	12.0	9.0	4.0	2.0	3.5	1.5	1.5	0.0	7.0	2.0
15	18.5	17.0	11.0	7.5	2.0	1.0	3.5	2.0	3.0	0.0	6.5	5.5
16	18.0	15.5	9.5	9.0	2.0	1.0	---	---	3.5	1.0	7.5	4.0
17	17.0	15.5	10.0	7.5	2.5	1.5	---	---	4.0	1.5	5.5	3.5
18	16.5	15.5	10.5	7.5	3.0	2.0	1.5	1.0	4.0	1.5	6.5	4.0
19	15.5	14.5	10.0	8.5	4.5	2.5	2.0	1.0	3.0	0.5	7.0	4.5
20	15.5	14.5	10.0	7.0	3.0	2.0	3.0	1.0	3.5	1.0	6.0	5.0
21	15.5	15.0	8.0	6.0	2.5	1.0	3.0	1.5	1.5	0.0	5.0	3.0
22	15.5	15.0	9.0	6.0	2.0	1.0	4.0	1.0	1.5	0.0	6.5	3.0
23	15.5	15.0	6.0	3.5	3.5	1.5	3.0	2.5	1.0	0.5	6.0	5.5
24	15.5	14.5	5.0	2.0	3.0	1.0	4.5	2.0	1.5	0.0	6.0	4.5
25	15.5	14.5	5.0	2.0	2.5	0.5	4.5	2.5	2.0	0.5	5.5	4.5
26	15.0	14.5	6.5	2.5	2.5	1.0	4.5	0.5	1.5	0.5	5.5	3.5
27	15.5	15.0	6.5	2.5	2.0	1.0	1.0	0.0	4.5	1.0	5.5	4.0
28	16.0	15.0	4.5	2.5	2.0	1.0	0.0	0.0	6.5	2.0	6.5	5.0
29	16.0	15.5	5.5	2.5	2.0	1.0	1.0	0.0	---	---	6.5	5.0
30	15.5	15.0	4.5	3.0	---	---	1.0	0.0	---	---	7.5	5.5
31	16.0	15.5	---	---	---	---	1.0	0.0	---	---	10.0	7.0
MONTH	19.5	14.5	15.5	2.0	9.5	0.5	---	---	6.5	0.0	10.0	1.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	7.0	14.0	12.0	19.5	18.0	28.5	27.0	25.0	23.5	24.0	22.5
2	9.0	7.5	13.5	12.0	19.0	17.5	27.5	25.0	24.0	23.0	25.5	24.0
3	8.5	6.0	13.5	11.0	20.0	18.0	28.0	25.0	23.0	21.5	26.0	24.5
4	9.0	7.0	14.5	11.0	21.5	18.5	28.0	24.0	22.0	19.0	26.0	25.0
5	7.5	6.0	14.0	13.0	22.5	18.5	27.5	25.0	21.5	18.5	26.0	24.5
6	8.0	5.0	15.0	13.5	---	---	27.5	25.5	24.0	21.0	26.0	24.5
7	8.0	7.0	15.0	13.5	26.0	22.0	28.0	24.5	24.5	21.0	26.0	24.5
8	10.0	7.0	15.5	13.5	25.0	22.0	27.0	23.5	25.0	23.0	26.5	24.5
9	10.0	8.0	14.0	12.5	23.5	21.0	27.0	24.5	25.0	24.0	26.0	22.0
10	10.0	6.0	15.5	13.0	23.0	21.0	27.0	23.5	26.5	24.5	26.5	21.5
11	11.0	8.0	15.5	14.5	22.5	22.0	26.5	23.0	25.0	23.0	26.5	25.0
12	12.0	10.0	16.0	15.0	23.0	21.5	26.0	23.5	25.5	23.0	26.0	24.5
13	12.0	11.0	16.5	14.5	22.5	22.0	25.5	24.0	25.5	23.5	25.5	23.0
14	13.5	8.5	17.0	14.5	23.5	22.0	25.0	23.5	25.5	23.5	25.0	22.0
15	13.5	10.5	18.5	15.5	23.5	22.0	25.0	23.0	24.0	23.0	25.5	23.5
16	15.0	12.0	19.0	18.0	24.0	20.0	25.5	21.0	25.0	22.5	23.5	22.0
17	15.0	13.5	22.0	18.0	25.5	23.5	25.0	23.5	25.5	23.5	22.5	20.0
18	15.5	13.5	21.0	19.0	26.0	23.5	24.5	23.5	25.5	23.5	22.0	20.0
19	15.0	12.0	22.0	20.0	26.5	25.0	24.0	21.5	26.5	24.5	23.0	19.0
20	15.5	13.0	21.0	20.0	26.0	25.0	24.5	22.5	26.0	24.5	23.0	20.5
21	15.5	13.0	21.0	20.0	25.5	24.0	25.0	23.0	26.5	23.5	21.5	20.0
22	15.0	14.0	21.0	18.0	25.5	23.5	25.5	22.5	26.5	22.0	21.5	19.5
23	15.5	13.5	20.5	19.5	26.0	24.0	25.0	23.0	26.0	24.5	21.5	19.5
24	15.0	13.5	21.0	19.5	26.5	24.5	25.0	23.5	26.0	24.0	21.0	19.0
25	13.5	10.5	20.0	18.0	26.5	24.5	26.5	23.5	26.0	23.5	20.0	18.5
26	13.5	12.5	19.0	17.5	26.5	24.0	26.0	23.5	26.5	24.5	20.0	18.5
27	14.0	12.0	17.5	15.5	27.5	25.0	25.5	23.0	25.5	24.0	20.5	19.0
28	14.5	12.0	16.0	14.5	28.0	24.5	25.5	24.0	25.0	24.0	22.0	19.5
29	13.5	11.5	17.5	15.5	28.0	25.0	25.5	23.5	25.5	24.0	21.5	20.0
30	13.0	11.0	18.0	16.5	29.0	26.5	25.0	23.5	25.0	23.5	22.0	20.5
31	---	---	19.5	15.5	---	---	25.0	23.5	24.0	23.0	---	---
MONTH	15.5	5.0	22.0	11.0	29.0	17.5	28.5	21.0	26.5	18.5	26.5	18.5
YEAR	29.0	0.0										

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04194030 MAUMEE RIVER AT CENTER C. AND O. RAILROAD DOCK, AT TOLEDO, OHIO

LOCATION.--Lat 41°41'46", long 83°21'39", Lucas County, at mouth at end of center dock of Chesapeake and Ohio Railroad coal-loading dock, at Toledo.

PERIOD OF RECORD.--Chemical analyses: June 1962 to September 1971

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)
OCT.											
07...	0900	--	147	0	48	28	--	--	--	21	170
14...	0900	--	164	0	66	36	--	--	--	26	190
21...	--	42	236	0	100	50	14	1.9	440	36	280
28...	--	--	214	0	90	47	--	--	--	31	240
NOV.											
04...	0900	36	174	0	81	44	17	1.3	354	32	220
18...	0915	--	160	4	75	36	--	--	--	50	210
25...	0940	--	156	4	65	32	--	--	--	52	190
DEC.											
02...	0900	28	232	0	110	38	35	1.2	462	42	320
09...	0930	--	172	0	100	38	--	--	--	47	260
16...	0915	--	183	0	100	40	--	--	--	27	270
23...	0915	--	194	6	110	38	--	--	--	--	310
JAN.											
06...	0915	25	178	6	92	42	34	1.0	402	7	260
13...	0930	--	177	6	82	42	--	--	--	15	270
FEB.											
17...	0915	20	82	0	53	32	21	1.5	240	34	130
MAR.											
03...	0845	--	106	0	47	18	--	--	--	97	160
10...	0915	--	142	0	63	28	--	--	--	41	200
17...	0830	--	156	0	71	30	--	--	--	88	240
24...	0845	--	163	0	74	26	--	--	--	75	240
31...	0845	17	178	0	92	32	47	1.1	408	29	270
APR.											
07...	0830	--	194	0	86	34	--	--	--	59	280
14...	0845	--	204	0	97	36	--	--	--	31	290
21...	--	--	168	0	100	42	--	--	--	32	260
28...	--	28	198	0	100	42	27	1.5	418	18	270
MAY											
12...	--	--	147	0	73	26	--	--	--	79	250
19...	--	--	150	0	71	28	--	--	--	26	240
26...	--	17	160	0	84	30	51	.93	392	40	250
JUNE											
02...	0900	--	150	0	71	28	--	--	--	--	240
09...	0845	15	160	0	77	29	47	.92	358	--	260
16...	0900	--	164	0	67	28	--	--	--	--	240
23...	0900	--	155	0	51	30	--	--	--	--	230
JULY											
07...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	138	0	63	32	--	--	--	45	180
21...	--	27	156	0	91	44	20	1.2	348	23	230
AUG.											
04...	0900	22	149	0	66	34	6.5	.70	246	20	190
11...	0900	--	138	0	55	32	--	--	--	32	170
18...	0915	--	148	0	61	38	--	--	--	21	180
25...	--	--	141	0	58	36	--	--	--	24	170
SEP.											
01...	--	--	125	0	48	31	--	--	--	26	150
08...	--	--	131	0	45	30	--	--	--	12	150
15...	--	--	--	--	--	--	--	--	--	14	--
22...	--	--	140	0	68	38	--	--	--	13	180
30...	--	35	156	0	60	52	15	1.7	348	11	220

04194030 MAUMEE RIVER AT CENTER C. AND O. RAILROAD DOCK, AT TOLEDO, OHIO--Continued

REMARKS.--Determinations of suspended solids and dissolved oxygen (DO) furnished by the city of Toledo, Division of Sewage Disposal. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TUR-BID-ITY (JTU)
OCT.										
07...	50	424	7.3	16.5	5	7.3	74	2.6	--	7
14...	56	486	7.6	18.0	7	6.1	64	3.0	--	10
21...	86	693	7.3	15.5	15	4.8	48	4.8	.05	10
28...	64	622	7.5	15.5	10	6.4	63	4.2	--	10
NOV.										
04...	78	568	7.3	13.5	40	6.2	59	2.7	.22	25
18...	72	519	8.4	8.0	10	9.2	77	4.0	--	34
25...	56	475	8.3	3.5	12	11.9	89	3.5	--	40
DEC.										
02...	130	687	7.5	5.5	75	11.2	89	4.0	.08	30
09...	120	603	7.4	4.5	20	10.7	82	4.2	--	45
16...	120	623	7.7	4.0	20	11.3	86	3.5	--	25
23...	140	661	8.4	3.5	20	11.7	88	5.2	--	30
JAN.										
06...	100	595	8.4	.0	20	12.7	87	2.5	.09	10
13...	110	593	8.3	.0	10	11.9	82	2.4	--	4
FEB.										
17...	63	358	7.6	1.0	100	9.0	63	6.6	.08	50
MAR.										
03...	73	365	7.1	3.5	35	11.5	86	3.8	--	70
10...	84	465	8.1	1.0	30	11.7	82	6.2	--	30
17...	110	520	7.5	4.5	20	10.7	82	2.8	--	60
24...	110	518	8.0	4.0	30	11.6	88	2.5	--	60
31...	120	579	7.3	5.5	20	10.5	83	4.5	.11	15
APR.										
07...	120	598	7.4	6.5	25	10.9	88	5.4	--	3
14...	120	620	8.1	11.0	15	11.4	103	5.6	--	5
21...	120	596	7.8	--	15	7.7	75	5.1	--	20
28...	110	622	7.4	13.5	25	4.8	46	2.3	.13	7
MAY										
12...	130	529	7.9	15.5	30	7.5	74	3.4	--	60
19...	120	529	7.3	19.0	20	6.4	68	1.6	--	17
26...	120	542	7.4	18.5	25	5.9	63	5.6	.12	25
JUNE										
02...	120	503	7.2	18.5	22	4.5	48	4.8	--	76
09...	130	562	7.3	21.5	21	4.6	52	2.2	.12	35
16...	100	533	7.1	24.0	15	5.3	62	--	--	30
23...	100	513	7.4	26.0	10	3.2	39	2.4	--	30
JULY										
07...	--	--	--	26.0	--	5.2	63	.8	--	--
14...	67	430	8.1	25.5	10	4.6	55	.2	--	40
21...	100	570	8.0	25.5	10	4.4	54	2.9	.08	10
AUG.										
04...	68	467	7.4	23.5	7	5.8	67	2.7	.09	10
11...	57	422	7.1	25.5	10	5.0	60	--	--	10
18...	59	457	7.1	25.5	5	4.4	53	2.6	--	2
25...	54	443	7.1	24.0	5	2.3	27	--	--	5
SEP.										
01...	48	386	7.9	23.0	10	3.9	45	--	--	15
08...	42	387	7.1	24.0	10	1.5	18	--	--	1
15...	--	--	--	24.5	--	1.2	14	--	--	--
22...	66	492	7.0	19.5	5	2.5	27	--	--	0
30...	92	576	7.6	21.5	6	.3	3	--	.11	1

04194310 MIDDLE BRANCH PORTAGE RIVER NEAR PORTAGE, OHIO

LOCATION.--Lat 41°20'19", long 83°33'10", in NW 1/4 sec.1, T.4 N., R.11 E., Wood County, on downstream side of center pier of bridge on Bloomdale Road, 3.4 miles upstream from South Branch Portage River, 5 miles downstream from Rocky Ford, and 6 miles east northeast of Portage.

DRAINAGE AREA.--217 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1969 to September 1971.
Water temperatures: April 1969 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,480 micromhos Sept. 6; minimum, 231 micromhos June 6.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.							
03...	1040	176	8	170	71	.5	8.7
06...	1700	--	--	--	--	--	--
13...	1530	179	0	270	93	.6	2.3
NOV.							
02...	0740	258	0	210	110	.6	.9
10...	1125	262	0	220	140	.7	1.6
DEC.							
15...	1045	176	0	120	31	.3	64
31...	0950	243	17	200	48	.4	52
JAN.							
07...	1305	239	0	150	36	.3	50
29...	1705	362	0	280	150	.6	35
FEB.							
02...	1735	378	36	390	200	.6	45
18...	1620	58	0	37	18	.2	15
MAR.							
01...	1620	149	0	82	21	.3	43
30...	1605	221	0	150	35	.4	41
APR.							
06...	1750	206	0	150	49	.3	28
14...	1240	216	0	160	66	.3	24
MAY							
04...	1225	170	0	175	62	.4	5.6
07...	0845	140	0	79	30	.3	94
21...	1245	--	--	--	--	--	--
JUNE							
08...	1405	171	4	75	21	.2	63
11...	1005	190	6	120	48	.3	59
JULY							
10...	0815	154	0	200	75	.4	2.6
21...	1200	164	4	63	16	.2	23
AUG.							
04...	1925	189	0	160	56	.3	1.3
31...	2005	127	0	410	100	.6	1.5
SEP.							
18...	1956	166	0	300	250	.8	1.7
30...	1330	200	0	160	55	.3	11

04194310 MIDDLE BRANCH PORTAGE RIVER NEAR PORTAGE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1970-71): Maximum, 1,480 micromhos Sept. 6, 1971; minimum, 231 micromhos June 6, 1971.

REMARKS.--Continuous water-quality recorder operated since April 1969. Maximum recorded specific conductance value of 1,810 micromhos occurred Sept. 4, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
03...	562	330	170	843	8.5	--	--
06...	--	--	--	--	--	10	4.1
13...	746	420	270	1090	7.4	--	--
NOV.							
02...	742	410	200	1110	8.0	--	--
10...	794	410	200	1220	8.1	--	--
DEC.							
15...	468	300	160	655	8.1	--	--
31...	646	440	210	922	8.5	--	--
JAN.							
07...	528	380	180	789	7.6	--	--
29...	1000	620	320	1510	7.4	--	--
FEB.							
02...	1320	810	440	1900	8.6	--	--
18...	164	94	46	268	6.6	--	--
MAR.							
01...	356	240	120	521	8.0	--	--
30...	510	360	180	740	7.9	--	--
APR.							
06...	486	360	190	753	7.8	--	--
14...	562	370	190	855	8.1	--	--
MAY							
04...	521	330	190	807	7.3	--	--
07...	443	300	180	629	7.0	--	--
21...	--	--	--	--	--	16	1.1
JUNE							
08...	354	280	130	565	8.3	--	--
11...	470	340	170	789	8.3	--	--
JULY							
10...	536	340	210	851	7.4	--	--
21...	298	230	89	482	8.3	--	--
AUG.							
04...	470	330	170	768	7.4	--	--
31...	848	540	440	1250	7.4	--	--
SEP.							
10...	976	460	320	1500	7.5	--	--
30...	524	350	180	799	7.6	--	--

04194310 MIDDLE BRANCH PORTAGE RIVER NEAR PORTAGE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	836	810	1090	1050	---	---	963	926	---	---	---	---
2	850	809	1100	1050	---	---	979	931	---	---	---	---
3	850	828	1060	1020	---	---	963	941	---	---	---	---
4	857	846	1150	1060	---	---	934	735	---	---	---	---
5	911	855	1180	1150	---	---	780	634	---	---	---	---
6	947	911	1170	1140	---	---	700	638	---	---	---	---
7	970	947	1240	1170	---	---	815	700	---	---	---	---
8	968	958	1260	1240	---	---	934	815	---	---	---	---
9	971	953	1260	1230	867	842	969	934	---	---	---	---
10	979	966	1230	1190	878	867	976	937	---	---	664	655
11	1000	979	1200	1180	873	847	934	892	---	---	690	664
12	1030	1000	1190	1150	840	641	895	869	---	---	692	651
13	1080	986	1170	1160	642	578	910	882	---	---	651	547
14	1030	968	1170	1130	659	608	---	---	---	---	574	557
15	1210	981	1140	1130	681	652	---	---	---	---	579	546
16	1210	924	1150	1130	716	681	---	---	---	---	617	536
17	924	877	1230	1150	752	707	---	---	---	---	622	582
18	904	876	1230	1220	703	658	---	---	---	---	648	622
19	904	891	1230	1200	692	663	---	---	---	---	663	648
20	907	870	1230	1180	685	670	---	---	---	---	665	654
21	875	862	1220	1180	729	678	---	---	---	---	670	654
22	914	875	---	---	759	716	---	---	---	---	681	670
23	949	912	---	---	770	746	---	---	---	---	689	676
24	947	913	---	---	759	724	---	---	---	---	717	689
25	981	945	---	---	770	742	---	---	---	---	726	710
26	1010	968	---	---	817	768	---	---	---	---	732	716
27	1030	1010	---	---	825	802	---	---	---	---	733	718
28	1040	1030	---	---	846	825	---	---	---	---	744	728
29	1050	1030	---	---	874	833	---	---	---	---	734	723
30	1040	1020	---	---	918	864	---	---	---	---	741	718
31	1060	1020	---	---	926	913	---	---	---	---	752	729
MONTH	1210	809	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	752	741	825	795	767	725	707	645	737	696	1230	1210
2	780	739	823	784	749	630	722	703	703	683	1240	1200
3	793	765	817	778	667	639	705	670	720	687	1280	1220
4	769	756	822	765	700	667	681	658	761	720	1370	1280
5	760	745	811	766	726	422	681	649	785	761	1460	1370
6	760	745	783	714	422	231	707	681	841	785	1480	1440
7	771	749	714	648	481	356	724	705	872	841	1450	1430
8	760	747	686	669	600	481	767	724	897	872	1430	1270
9	767	747	701	670	683	600	817	767	931	892	1270	1220
10	776	763	721	697	765	683	900	802	960	864	1220	1200
11	780	758	725	711	796	765	802	450	926	848	1250	1210
12	795	738	730	712	783	248	610	552	934	817	1310	1250
13	804	763	734	721	572	413	661	610	817	780	1360	1310
14	867	789	728	704	636	562	674	659	780	750	1400	1350
15	862	825	714	701	690	636	681	616	772	742	1420	1380
16	825	796	719	700	733	690	638	601	817	772	1410	1380
17	802	774	738	710	742	724	678	636	833	800	1430	1390
18	789	769	735	711	746	720	696	672	861	830	1450	1410
19	775	760	738	712	729	685	678	584	890	861	1460	1440
20	771	760	756	727	696	654	584	330	910	890	1450	913
21	785	765	777	727	678	502	515	419	934	892	985	785
22	791	772	751	712	674	539	586	515	982	892	807	772
23	787	779	751	732	674	654	641	586	1030	982	843	807
24	799	781	747	669	690	638	658	623	1060	1030	854	841
25	803	782	753	596	672	641	634	525	1080	1050	851	820
26	797	770	661	614	689	670	628	580	1100	1060	828	789
27	813	767	695	661	692	672	670	627	1120	1080	796	647
28	822	792	726	695	698	674	696	670	1140	1110	864	687
29	831	803	757	724	681	581	711	692	1180	1120	861	789
30	848	820	780	740	645	566	698	672	1220	1170	797	791
31	---	---	778	752	---	---	733	667	1220	1200	---	---
MONTH	867	738	825	596	796	231	900	330	1220	683	1480	647
YEAR	1480	231										

04194310 MIDDLE BRANCH PORTAGE RIVER NEAR PORTAGE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	0.5	0.0	---	---	---	---
2	---	---	---	---	---	---	0.5	0.0	---	---	---	---
3	---	---	---	---	---	---	0.5	0.0	---	---	---	---
4	---	---	---	---	---	---	0.5	0.0	---	---	---	---
5	---	---	---	---	---	---	0.0	0.0	---	---	---	---
6	---	---	---	---	---	---	0.5	0.0	---	---	---	---
7	---	---	---	---	---	---	0.5	0.0	---	---	---	---
8	---	---	---	---	---	---	0.5	0.0	---	---	---	---
9	---	---	---	---	5.5	4.0	0.5	0.0	---	---	---	---
10	---	---	---	---	4.0	2.5	0.5	0.0	---	---	1.0	0.5
11	---	---	---	---	3.5	3.0	0.5	0.0	---	---	3.0	0.5
12	---	---	---	---	3.5	2.0	0.5	0.0	---	---	5.0	1.5
13	---	---	---	---	4.0	3.0	0.5	0.0	---	---	4.0	2.0
14	---	---	---	---	3.0	2.0	---	---	---	---	7.0	2.5
15	---	---	---	---	1.5	0.5	---	---	---	---	7.5	4.5
16	---	---	---	---	1.5	0.0	---	---	---	---	4.5	2.0
17	---	---	---	---	3.0	1.5	---	---	---	---	4.0	1.0
18	---	---	---	---	3.5	2.5	---	---	---	---	2.5	1.5
19	---	---	---	---	5.5	2.5	---	---	---	---	3.0	2.0
20	---	---	---	---	4.5	2.5	---	---	---	---	3.0	1.0
21	---	---	---	---	2.5	1.0	---	---	---	---	6.0	0.0
22	---	---	---	---	2.5	1.5	---	---	---	---	5.0	3.5
23	---	---	---	---	3.5	1.5	---	---	---	---	3.5	0.5
24	---	---	---	---	1.0	0.0	---	---	---	---	4.0	0.0
25	---	---	---	---	0.0	0.0	---	---	---	---	4.5	0.0
26	---	---	---	---	0.5	0.0	---	---	---	---	7.0	0.5
27	---	---	---	---	0.0	0.0	---	---	---	---	7.0	2.5
28	---	---	---	---	0.5	0.0	---	---	---	---	11.0	5.5
29	---	---	---	---	0.5	0.0	---	---	---	---	9.0	5.0
30	---	---	---	---	0.5	0.0	---	---	---	---	9.0	2.0
31	---	---	---	---	0.5	0.0	---	---	---	---	11.5	4.0
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	8.0	13.0	12.5	22.5	19.0	32.0	25.5	27.5	18.5	24.0	19.0
2	8.5	5.0	13.0	12.0	19.0	16.5	30.0	24.0	29.0	21.5	24.5	21.5
3	5.5	2.5	13.5	12.0	21.5	16.5	31.0	22.0	25.0	22.5	24.5	20.5
4	9.0	1.5	14.0	12.0	25.5	18.5	30.5	24.0	23.0	20.5	27.0	21.5
5	7.0	4.0	14.0	13.0	27.0	22.0	26.5	23.5	25.5	17.5	30.0	21.5
6	8.5	2.0	11.0	10.0	23.0	19.0	33.5	22.5	28.0	18.0	25.0	22.5
7	12.0	3.5	12.0	10.5	23.0	19.5	34.5	23.5	30.5	19.5	30.0	21.5
8	14.5	6.5	15.5	11.0	21.5	18.0	31.0	24.5	31.5	21.0	30.5	22.5
9	15.0	9.0	17.0	12.5	22.0	15.5	30.0	25.0	31.0	21.5	29.0	23.0
10	14.5	6.5	20.5	13.5	24.5	16.0	28.5	24.0	31.5	23.0	28.5	20.5
11	16.5	8.0	18.5	15.0	23.5	18.0	25.5	22.0	29.5	22.0	26.0	22.0
12	19.5	11.5	17.0	14.5	22.5	19.0	26.5	20.0	27.0	19.5	25.0	20.0
13	16.5	11.0	17.5	11.5	24.0	19.5	27.5	22.0	28.5	20.5	22.5	18.0
14	13.5	7.0	21.5	13.0	23.5	20.5	27.0	21.0	29.0	22.0	26.5	16.5
15	14.0	8.5	23.0	15.0	25.5	20.0	25.0	20.0	25.0	22.0	25.0	19.0
16	16.5	9.5	23.0	18.0	27.5	19.5	27.5	19.0	28.5	21.0	22.5	17.0
17	19.0	13.5	26.0	18.0	28.5	21.5	29.0	21.5	30.5	18.0	24.0	17.5
18	19.0	13.5	27.0	20.5	29.5	22.0	29.5	20.5	31.0	18.5	22.5	15.5
19	19.0	12.0	26.0	21.0	31.5	24.0	24.5	19.0	29.0	20.5	21.0	16.5
20	20.5	12.5	23.5	18.0	31.5	25.0	21.0	17.0	30.0	21.5	19.5	17.0
21	18.5	13.0	24.5	17.5	28.0	24.5	24.0	18.5	31.0	22.5	18.0	14.0
22	16.0	11.0	23.5	16.0	28.0	21.0	26.5	20.0	31.5	21.0	20.5	14.0
23	19.0	11.0	24.0	15.5	28.5	22.0	27.0	21.5	29.0	20.5	20.5	15.5
24	15.0	11.5	23.5	18.0	30.5	23.5	25.0	22.0	28.0	17.5	20.0	13.0
25	19.0	10.5	19.5	14.0	32.0	24.5	24.5	19.5	30.0	19.5	15.5	13.0
26	19.0	13.0	14.0	12.5	28.5	25.0	25.0	22.0	27.0	21.5	17.5	13.5
27	15.0	11.5	14.5	11.0	34.5	24.5	24.5	18.5	25.0	19.0	20.5	16.0
28	12.5	11.5	19.5	12.0	36.5	27.5	23.5	19.0	23.5	17.0	24.0	18.5
29	13.0	10.5	21.5	14.0	31.0	26.5	26.5	20.0	28.5	18.0	25.5	21.0
30	13.0	12.0	23.5	15.5	30.5	24.0	24.0	20.5	30.0	19.5	26.5	23.0
31	---	---	25.0	18.5	---	---	25.0	17.5	27.0	21.5	---	---
MONTH	20.5	1.5	27.0	10.0	36.5	15.5	34.5	17.0	31.5	17.0	30.5	13.0

04195600 PORTAGE RIVER AT RAILROAD BRIDGE, AT WOODVILLE, OHIO

LOCATION.--Lat 41°26'58", long 83°21'29", Sandusky County, on right bank at old interurban line bridge abutment, just downstream from railroad bridge, and 800 ft downstream from gaging station at Woodville.

DRAINAGE AREA.--428 sq mi (at gaging station).

PERIOD OF RECORD.--Chemical analyses: June 1968 to September 1971.
Water temperatures: June 1968 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 2,350 micromhos Feb. 4; minimum, 251 micromhos Feb. 21.
Water temperatures: Maximum, 33.0°C June 28; minimum, freezing point on many days during November to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.							
01...	1135	24	194	0	160	86	.6
06...	1445	--	--	--	--	--	--
30...	1105	16	238	0	200	95	.8
NOV.							
05...	1600	22	224	0	200	150	.9
28...	1600	76	246	0	170	65	.5
DEC.							
02...	0850	227	182	0	130	38	.3
04...	1600	121	234	0	190	79	.5
JAN.							
07...	1215	220	198	11	140	49	.4
30...	1600	22	283	7	260	200	.7
FEB.							
13...	1600	100	158	0	120	74	.4
19...	1600	460	49	0	31	30	.3
MAR.							
17...	1500	960	177	0	100	30	.5
27...	1600	180	200	9	160	52	.3
APR.							
02...	1600	126	222	0	150	54	.0
09...	1000	78	178	0	200	100	.1
MAY							
08...	1600	646	162	0	100	35	.2
12...	2000	164	220	0	140	40	.3
JUNE							
15...	1615	--	--	--	--	--	--
15...	1630	316	218	6	96	30	.3
19...	1600	80	222	10	140	58	.3
JULY							
12...	1245	280	166	0	89	52	.3
17...	1600	31	144	0	170	110	.5
AUG.							
20...	1200	8.8	146	0	210	160	.6
25...	1005	11	176	0	150	120	.7
SEP.							
15...	1145	10	136	0	250	210	.7
30...	--	54	170	0	120	60	.4

04195600 PORTAGE RIVER AT RAILROAD BRIDGE, AT WOODVILLE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1970-71): Maximum, 2,350 micromhos Feb. 4, 1971; minimum, 251 micromhos Feb. 21, 1971.
Water temperatures (1970-71): Maximum, 33.0°C June 28, 1971; minimum, freezing point on many days during November 1970 to March 1971.

REMARKS.--Continuous water-quality recorder operated since June 1968. Maximum recorded water temperature of 35.0°C occurred Aug. 4, 1969. Interruptions in the record were due to malfunctions of the instrument. Dissolved oxygen concentrations of 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for 04195500 Portage River at Woodville, Ohio.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
01...	15	572	360	200	916	--	--
06...	--	--	--	--	--	12	1.1
30...	6.2	646	390	190	1020	--	--
NOV.							
05...	9.4	794	440	260	1190	--	--
28...	17	592	400	200	914	--	--
DEC.							
02...	29	478	310	160	706	--	--
04...	81	656	440	250	956	--	--
JAN.							
07...	41	504	350	170	763	--	--
30...	40	992	520	280	1540	--	--
FEB.							
13...	28	466	270	140	748	--	--
19...	20	170	85	45	281	--	--
MAR.							
17...	64	430	310	160	636	--	--
27...	42	540	380	200	825	--	--
APR.							
02...	32	526	370	190	827	--	--
09...	23	694	430	280	983	--	--
MAY							
08...	80	452	330	200	698	--	--
12...	52	472	370	190	773	--	--
JUNE							
15...	--	--	--	--	--	64	4.5
15...	59	468	340	150	686	--	--
19...	22	584	390	190	868	--	--
JULY							
12...	20	358	240	100	604	--	--
17...	14	582	360	200	944	--	--
AUG.							
20...	7.1	678	360	240	1120	--	--
25...	5.4	518	290	140	903	--	--
SEP.							
15...	4.3	772	450	340	1240	--	--
30...	18	406	290	150	706	--	--

04195600 PORTAGE RIVER AT RAILROAD BRIDGE, AT WOODVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1090	888	1040	978	656	657	1100	986	1690	1540	606	294
2	1060	864	1210	1010	738	693	1080	983	1730	1580	636	552
3	1220	854	1250	1020	855	732	1540	1020	1730	1550	678	483
4	1090	927	1160	1030	912	795	1440	819	2350	859	747	495
5	1130	918	1160	1010	795	651	861	792	859	502	814	523
6	1160	874	1370	1070	753	675	816	744	502	397	803	629
7	1180	932	1180	1050	897	750	796	760	445	313	783	651
8	1060	786	1170	1070	861	783	863	790	517	376	802	697
9	1040	753	1180	1060	927	834	940	880	589	457	803	653
10	1220	958	1250	1020	1070	840	994	940	742	499	900	618
11	1120	1010	1150	1020	948	867	1010	983	751	676	904	715
12	1850	1010	1160	1010	971	758	1020	980	1060	628	914	653
13	1470	1050	1130	1010	785	620	1050	971	844	727	897	702
14	1210	1040	1010	966	687	621	1180	979	1030	765	733	586
15	1220	890	1000	984	723	687	1050	985	991	889	698	530
16	1270	888	1020	987	810	717	1100	1020	1080	939	751	424
17	1290	756	1030	984	789	759	1410	1110	1040	515	738	573
18	1340	835	1130	1020	778	751	1250	1160	705	465	690	645
19	1210	764	1090	1000	763	724	1300	1160	428	290	729	690
20	1170	817	1230	951	751	742	1490	1250	316	262	729	714
21	1270	929	1210	999	776	743	1410	1230	335	251	705	693
22	1280	930	1130	1020	800	761	1380	1220	418	289	726	699
23	1250	1050	1170	1030	842	785	1290	1160	440	293	744	714
24	1210	670	1120	1050	842	803	1300	1190	430	256	756	729
25	1130	781	1120	1040	822	801	1360	1220	516	354	783	753
26	1110	796	1170	1100	870	816	1370	1240	48[illegible]	313	789	774
27	1050	805	1140	1010	876	840	1460	1260	435	261	813	774
28	1050	598	1040	864	904	856	1500	1310	459	279	801	789
29	1130	1010	879	774	961	883	1650	1400	---	---	801	783
30	1160	1010	807	690	1020	922	1650	1510	---	---	810	774
31	1100	1010	---	---	1080	932	1640	1560	---	---	855	780
MONTH	1850	598	1370	690	1080	620	1650	744	2350	251	914	294

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	879	789	969	906	858	769	648	531	1020	768	1160	834
2	882	798	948	903	855	759	660	507	941	779	1090	812
3	835	813	960	864	762	684	930	606	874	817	1040	687
4	882	840	996	870	744	735	765	609	898	820	1040	700
5	855	822	960	825	---	---	822	618	972	828	924	660
6	921	816	915	780	---	---	819	636	1230	881	1010	642
7	921	816	780	618	---	---	789	678	1080	928	1020	683
8	933	822	711	681	---	---	834	675	1090	972	932	692
9	981	828	714	705	---	---	---	---	1060	959	892	574
10	957	867	771	714	---	---	---	---	1080	946	982	649
11	882	861	786	744	---	---	---	---	1090	897	1110	894
12	918	840	831	762	---	---	666	609	1210	975	1130	934
13	927	834	876	774	---	---	765	645	1420	932	1220	871
14	987	819	918	783	---	---	837	657	1080	937	1190	965
15	951	861	945	831	741	714	905	717	1040	867	1230	988
16	960	906	873	765	780	738	1000	788	1080	944	1090	1020
17	969	870	876	750	861	801	1000	899	1060	886	1100	989
18	900	834	873	750	888	822	1080	801	1270	978	1160	1010
19	867	613	870	744	999	774	801	574	1240	1060	1200	1030
20	900	798	858	795	834	678	899	449	1130	876	1060	551
21	903	765	879	813	765	687	568	469	1030	815	1260	833
22	870	762	891	828	807	693	698	568	1030	795	1280	958
23	840	756	921	795	735	564	705	612	875	779	985	898
24	912	822	837	672	762	633	805	640	1180	822	1040	874
25	867	828	903	621	831	690	791	716	1080	970	---	---
26	888	804	660	621	786	600	732	648	1100	944	---	---
27	873	744	738	660	747	609	784	697	1190	813	881	614
28	984	810	786	738	780	627	897	711	1200	929	614	506
29	993	906	792	780	780	600	838	694	1090	744	659	554
30	924	873	831	792	762	594	797	719	1130	1030	957	640
31	---	---	825	810	---	---	1030	742	1120	815	---	---
MONTH	993	744	996	618	---	---	1080	449	1420	744	1280	506
YEAR	2350	251										

04195600 PORTAGE RIVER AT RAILROAD BRIDGE, AT WOODVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.3	8.2	8.3	8.0	---	---	7.9	7.1	---	---	---	---
2	8.6	8.1	10.6	8.0	---	---	7.9	7.2	---	---	---	---
3	8.6	8.2	8.4	8.1	---	---	7.6	7.4	---	---	---	---
4	8.7	8.4	8.3	8.0	9.9	7.6	7.5	6.6	---	---	---	---
5	8.9	8.5	8.3	8.0	8.8	7.4	7.0	6.7	---	---	---	---
6	8.9	8.4	9.0	7.9	7.7	7.3	7.1	6.6	---	---	---	---
7	8.9	8.4	8.6	8.0	8.1	7.7	7.1	6.5	---	---	---	---
8	8.8	8.4	8.4	8.0	8.0	7.8	7.4	6.8	---	---	---	---
9	8.8	8.3	8.9	8.1	8.8	7.8	7.5	6.9	---	---	---	---
10	8.9	8.2	10.4	8.6	8.2	7.0	7.8	7.3	---	---	---	---
11	9.0	8.2	8.8	8.5	7.3	7.1	7.8	7.3	---	---	---	---
12	9.7	8.8	8.8	8.0	7.2	6.9	7.8	7.1	---	---	---	---
13	10.5	9.1	8.4	7.9	7.2	6.8	7.4	7.0	---	---	---	---
14	10.1	8.4	8.4	8.0	7.0	6.7	8.0	7.7	---	---	---	---
15	8.4	7.6	8.5	8.1	7.7	7.0	---	---	---	---	---	---
16	8.0	7.7	8.3	8.1	7.6	7.4	---	---	---	---	---	---
17	8.2	7.9	8.2	8.1	7.7	7.3	---	---	---	---	---	---
18	8.2	8.0	8.2	8.1	7.3	7.0	---	---	---	---	---	---
19	9.3	7.9	9.3	8.2	7.4	6.8	---	---	---	---	---	---
20	9.8	8.0	---	---	7.2	6.9	---	---	---	---	---	---
21	10.1	8.7	---	---	7.3	7.1	---	---	---	---	---	---
22	8.7	8.1	---	---	7.6	7.3	---	---	---	---	---	---
23	8.7	8.0	---	---	7.5	6.9	---	---	---	---	---	---
24	8.9	8.1	---	---	7.5	6.9	---	---	---	---	---	---
25	8.9	8.3	---	---	8.0	7.3	---	---	---	---	---	---
26	9.0	8.4	---	---	7.6	7.1	---	---	---	---	---	---
27	9.0	8.4	---	---	8.0	7.2	---	---	---	---	---	---
28	8.7	8.3	---	---	7.9	7.3	---	---	---	---	---	---
29	10.1	8.2	---	---	7.6	7.3	---	---	---	---	---	---
30	8.5	8.2	---	---	7.7	7.1	---	---	---	---	---	---
31	9.1	8.1	---	---	7.5	7.3	---	---	---	---	---	---
MONTH	10.5	7.6	---	---	9.9	6.7	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	9.2	8.8	8.2	7.6	8.0	7.5	10.4	8.5	8.1	7.6
2	---	---	9.2	9.0	8.4	7.6	8.1	7.6	11.5	8.6	7.9	7.5
3	---	---	9.2	9.1	7.6	7.2	8.7	8.0	11.5	8.6	8.5	7.6
4	---	---	9.3	9.1	7.3	7.2	9.0	8.2	11.7	8.7	8.5	8.0
5	---	---	9.3	9.0	---	---	8.9	8.5	12.0	8.4	8.2	8.0
6	---	---	9.1	7.7	---	---	9.0	8.4	8.9	8.6	8.3	8.0
7	---	---	7.7	7.4	---	---	8.9	8.6	10.0	8.8	8.4	7.7
8	---	---	7.7	7.5	---	---	9.2	8.8	10.9	8.8	9.3	8.2
9	---	---	7.7	7.6	---	---	---	---	12.0	8.9	8.5	8.3
10	---	---	8.0	7.6	---	---	---	---	10.9	9.5	8.8	8.2
11	---	---	8.2	7.7	---	---	---	---	11.2	9.3	8.7	8.2
12	---	---	8.3	7.6	---	---	7.8	7.7	11.4	8.7	8.9	8.3
13	---	---	8.5	8.0	---	---	7.9	7.7	11.3	8.1	9.9	8.4
14	8.9	8.6	8.6	8.0	---	---	8.3	7.8	11.6	8.6	9.3	8.3
15	8.8	8.4	8.7	8.1	7.9	7.8	8.3	7.9	11.9	8.9	9.1	8.8
16	8.7	8.3	8.7	8.0	8.1	7.9	8.7	8.0	11.4	8.6	9.2	8.8
17	8.8	8.2	8.8	7.9	8.2	7.9	9.0	8.1	11.9	8.7	9.1	8.7
18	9.0	8.2	8.8	7.9	8.6	8.1	9.1	8.4	10.2	8.6	8.9	8.6
19	9.1	8.6	8.6	8.0	8.9	8.3	9.1	8.5	9.4	8.8	8.8	8.4
20	9.2	8.7	8.6	7.6	8.7	8.1	8.5	7.4	9.1	8.9	8.7	8.2
21	9.2	8.7	8.4	7.4	9.0	7.8	7.5	7.3	8.9	8.6	8.4	8.0
22	9.3	8.7	8.6	7.4	9.9	7.8	7.4	7.3	8.9	8.5	8.0	7.6
23	9.3	8.9	9.0	7.6	8.9	8.1	7.8	7.4	8.9	8.3	8.5	7.8
24	9.4	8.9	8.9	7.7	8.8	8.4	7.9	7.6	9.0	8.7	8.5	7.9
25	9.3	8.9	8.6	7.3	8.6	8.3	7.9	7.7	8.9	8.5	8.4	8.1
26	9.3	8.9	7.4	7.3	8.5	8.2	7.7	7.4	8.8	8.4	8.4	7.5
27	9.3	8.9	7.6	7.4	8.7	8.1	7.9	7.5	8.7	8.3	7.8	7.0
28	9.3	9.0	7.6	7.6	8.9	8.3	9.0	7.8	8.4	7.8	7.4	7.3
29	9.4	8.9	7.7	7.5	9.0	8.2	8.7	8.2	7.8	7.3	7.6	7.3
30	9.3	8.9	7.8	7.5	8.8	8.0	8.9	8.4	7.8	7.4	7.6	7.5
31	---	---	7.9	7.6	---	---	8.7	8.3	8.3	7.6	---	---
MONTH	---	---	9.3	7.3	---	---	9.2	7.3	12.0	7.3	9.9	7.0

04195600 PORTAGE RIVER AT RAILROAD BRIDGE, AT WOODVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.7	8.1	---	---	---	---	---	---	---	---	---	---
2	10.8	6.7	---	---	---	---	---	---	---	---	---	---
3	9.5	5.9	---	---	---	---	---	---	---	---	---	---
4	10.4	6.2	---	---	---	---	---	---	---	---	---	---
5	10.4	7.0	---	---	---	---	---	---	---	---	---	---
6	10.2	6.8	---	---	---	---	---	---	---	---	---	---
7	10.3	6.0	---	---	---	---	---	---	---	---	---	---
8	10.0	6.1	---	---	---	---	---	---	---	---	---	---
9	9.6	6.0	---	---	---	---	---	---	---	---	---	---
10	11.0	5.5	---	---	---	---	---	---	---	---	---	---
11	10.5	6.3	---	---	---	---	---	---	---	---	---	---
12	8.1	6.1	---	---	---	---	---	---	---	---	---	---
13	8.9	5.9	---	---	---	---	---	---	---	---	---	---
14	8.8	6.4	---	---	---	---	---	---	---	---	---	---
15	8.3	5.6	---	---	---	---	---	---	---	---	---	---
16	7.8	6.8	---	---	---	---	---	---	---	---	---	---
17	8.3	7.1	---	---	---	---	---	---	---	---	15.0	13.0
18	8.9	7.4	---	---	---	---	---	---	---	---	15.0	15.0
19	9.7	7.6	---	---	---	---	---	---	---	---	15.0	15.0
20	8.6	7.7	---	---	---	---	---	---	---	---	15.0	15.0
21	8.9	7.8	---	---	---	---	---	---	---	---	15.0	15.0
22	9.8	8.0	---	---	---	---	---	---	---	---	15.0	15.0
23	10.5	8.1	---	---	---	---	---	---	---	---	15.0	15.0
24	11.0	8.6	---	---	---	---	---	---	---	---	15.0	15.0
25	11.2	8.6	---	---	---	---	---	---	---	---	15.0	15.0
26	11.4	8.6	---	---	---	---	---	---	---	---	15.0	15.0
27	12.0	9.0	---	---	---	---	---	---	---	---	15.0	15.0
28	9.8	9.0	---	---	---	---	---	---	---	---	15.0	14.4
29	---	---	---	---	---	---	---	---	---	---	15.0	13.6
30	---	---	---	---	---	---	---	---	---	---	15.0	13.8
31	---	---	---	---	---	---	---	---	---	---	15.0	12.9
MONTH	12.0	5.5	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	12.0	13.4	8.2	---	---	3.1	1.0	9.0	4.2	---	---
2	15.0	11.8	12.9	7.4	---	---	4.0	1.5	7.3	3.5	---	---
3	15.0	13.0	14.7	7.7	---	---	5.0	1.7	5.6	2.6	---	---
4	15.0	14.3	14.5	8.2	---	---	5.5	1.3	4.3	2.2	---	---
5	15.0	14.8	12.6	6.9	---	---	4.1	1.1	4.1	2.7	---	---
6	15.0	14.1	13.6	4.6	---	---	5.3	1.5	4.4	2.9	---	---
7	15.0	13.1	5.9	5.0	---	---	5.4	1.6	5.4	3.3	---	---
8	15.0	12.5	6.3	5.7	---	---	3.9	1.0	5.3	3.3	---	---
9	15.0	10.7	6.4	5.4	---	---	---	---	6.0	3.4	---	---
10	15.0	9.1	8.4	5.4	---	---	---	---	7.0	4.1	---	---
11	15.0	10.1	9.0	5.6	---	---	---	---	6.9	3.1	---	---
12	15.0	9.5	9.6	5.1	---	---	3.6	3.1	6.4	3.5	---	---
13	15.0	8.3	10.8	6.0	---	---	4.3	3.0	6.8	3.2	---	---
14	15.0	8.5	12.9	6.2	---	---	5.8	3.3	6.9	3.3	---	---
15	15.0	9.0	12.5	6.2	6.7	4.0	5.2	3.6	6.3	3.4	8.5	5.6
16	15.0	8.3	11.9	5.4	4.9	3.8	8.7	3.9	5.6	3.4	7.9	4.6
17	15.0	7.7	13.3	4.3	6.0	3.9	10.7	3.8	5.1	4.0	8.0	3.8
18	15.0	7.6	13.0	4.6	7.1	4.2	11.5	4.0	5.7	4.0	6.8	4.2
19	15.0	8.4	12.6	4.6	9.9	4.2	8.5	3.9	5.1	3.8	6.6	3.8
20	15.0	9.0	11.5	3.4	9.9	3.3	5.7	3.1	6.4	3.9	5.0	3.7
21	15.0	8.8	11.6	3.7	8.7	3.4	3.5	3.3	5.4	2.6	6.0	3.4
22	15.0	9.6	11.3	3.7	6.2	3.1	3.9	3.4	6.9	1.3	5.2	3.4
23	15.0	10.1	10.5	4.3	9.0	2.2	6.2	3.4	6.3	1.4	6.7	3.8
24	14.9	9.1	7.9	3.3	9.6	3.3	8.2	3.9	7.6	1.8	7.0	4.0
25	15.0	9.0	4.9	3.5	8.4	2.9	6.8	3.9	5.4	2.0	6.3	4.3
26	15.0	8.2	5.7	4.8	6.3	1.8	4.1	3.4	4.6	2.3	5.9	2.6
27	14.9	8.7	5.7	4.7	6.6	2.0	6.3	3.6	4.6	1.5	3.9	2.5
28	13.1	8.2	4.7	3.5	7.4	1.3	10.5	4.1	---	---	4.0	2.8
29	14.5	7.8	---	---	7.0	1.2	12.1	4.9	---	---	4.6	2.5
30	15.0	9.1	---	---	4.5	0.9	9.6	4.4	---	---	7.7	4.1
31	---	---	---	---	---	---	10.3	4.3	---	---	---	---
MONTH	15.0	7.6	14.7	3.3	---	---	12.1	1.0	9.0	1.3	---	---

04195600 PORTAGE RIVER AT RAILROAD BRIDGE, AT WOODVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	11.0	15.5	13.5	10.5	6.5	---	---	0.5	0.5	6.5	3.0
2	19.5	13.5	14.5	12.0	10.5	8.0	---	---	0.5	0.0	6.0	3.5
3	17.0	13.5	13.0	10.5	10.5	7.0	---	---	1.0	0.0	4.0	0.0
4	16.5	11.0	13.0	11.0	9.5	5.0	---	---	1.5	0.0	2.0	0.0
5	18.0	12.0	11.0	8.5	5.0	1.0	---	---	0.5	0.5	4.0	0.5
6	21.5	15.0	12.5	8.5	1.0	0.0	---	---	0.5	0.0	5.0	3.5
7	21.5	16.0	12.5	9.0	0.5	0.0	---	---	0.5	0.0	3.5	0.5
8	22.5	17.0	14.0	8.5	2.0	0.0	---	---	0.5	0.5	1.0	0.0
9	24.0	18.5	15.0	10.5	6.0	2.0	---	---	0.5	0.5	3.5	0.0
10	21.0	15.5	14.5	12.5	6.0	2.5	---	---	1.0	0.5	2.5	1.5
11	16.5	12.0	15.0	13.0	7.0	5.5	---	---	1.0	0.0	4.5	2.0
12	17.5	15.0	14.5	12.5	6.5	3.5	---	---	1.5	0.0	5.5	2.5
13	20.0	16.5	12.5	10.0	5.5	4.0	---	---	0.5	0.5	6.5	4.0
14	20.5	18.0	9.5	5.0	4.5	3.5	1.0	1.0	0.5	0.5	8.0	4.0
15	17.5	13.0	5.0	3.5	4.0	1.0	1.5	0.0	1.0	0.0	10.0	6.0
16	12.5	10.0	4.0	2.0	3.5	1.5	0.5	0.0	1.0	0.0	6.0	4.5
17	12.5	8.0	6.0	2.5	5.0	3.5	1.0	0.0	1.5	0.0	6.0	3.5
18	13.5	9.5	8.5	4.5	5.0	4.0	1.0	0.0	1.5	0.0	5.5	4.5
19	15.0	9.5	7.5	5.5	6.5	5.0	1.0	0.0	1.5	0.5	4.5	3.5
20	13.0	12.0	9.0	6.5	6.0	4.0	0.5	0.0	2.0	0.0	4.0	3.5
21	16.0	13.0	8.5	4.5	4.0	2.5	0.5	0.5	2.0	0.5	6.5	3.0
22	15.5	12.5	8.0	2.0	4.5	3.0	2.5	0.0	1.5	0.0	7.5	5.0
23	16.0	11.0	1.5	0.5	5.5	1.0	2.0	0.0	1.0	0.0	5.5	3.5
24	15.5	12.0	0.5	0.0	1.5	0.0	2.5	0.0	2.5	0.5	5.0	2.0
25	16.5	13.0	0.5	0.5	2.0	0.5	2.5	1.0	5.5	1.0	5.0	1.5
26	16.5	13.0	1.0	0.0	1.0	0.0	1.5	0.5	5.0	3.0	6.5	2.0
27	18.0	14.0	4.5	1.0	2.0	0.0	0.5	0.5	4.5	3.0	9.0	3.5
28	18.5	14.5	5.0	4.0	2.0	0.5	0.5	0.5	4.0	1.0	12.0	6.5
29	17.0	15.5	7.0	4.0	1.5	1.0	0.5	0.0	---	---	9.5	7.0
30	19.0	14.5	7.0	6.0	2.0	0.0	0.5	0.5	---	---	11.0	5.0
31	18.5	14.5	---	---	2.0	1.0	0.5	0.5	---	---	12.0	5.5
MONTH	24.0	8.0	15.5	0.0	10.5	0.0	---	---	5.5	0.0	12.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	9.0	16.5	12.0	22.5	19.5	32.5	27.5	27.5	18.5	---	---
2	8.5	5.5	14.5	11.5	25.0	19.0	30.5	25.0	29.5	20.5	---	---
3	7.0	4.5	18.0	10.5	25.0	20.0	31.5	22.0	26.0	22.5	---	---
4	10.0	3.5	18.5	11.5	25.0	24.0	30.5	22.0	23.5	21.0	---	---
5	7.5	4.5	17.5	13.5	---	---	30.0	24.5	26.5	18.5	---	---
6	9.0	3.0	19.0	14.5	---	---	29.5	22.5	28.5	19.0	---	---
7	13.5	4.5	16.0	13.0	---	---	30.0	23.5	30.5	20.0	---	---
8	15.0	7.0	18.0	13.5	---	---	29.5	23.0	30.5	22.0	---	---
9	14.5	10.0	19.5	15.5	---	---	---	---	30.5	22.5	---	---
10	15.5	8.0	21.5	16.5	---	---	---	---	32.0	24.5	---	---
11	17.5	8.5	20.5	17.5	---	---	---	---	28.5	23.5	---	---
12	20.0	11.5	19.0	16.0	---	---	27.0	24.5	27.5	20.0	---	---
13	17.0	11.5	20.0	15.0	---	---	27.0	19.0	29.5	21.0	---	---
14	16.0	8.0	22.0	16.0	---	---	27.5	21.5	28.5	22.0	---	---
15	16.0	11.5	23.5	16.5	25.0	24.0	26.0	20.0	26.0	22.5	---	---
16	18.0	12.0	24.0	19.0	27.5	21.5	28.5	19.5	28.5	22.0	---	---
17	19.5	15.0	27.0	18.5	29.0	22.5	28.0	22.0	29.5	19.0	---	---
18	18.5	15.0	29.5	21.0	28.5	21.5	29.0	19.0	30.0	19.5	---	---
19	19.5	13.5	28.0	22.5	29.5	21.0	23.5	20.0	28.5	21.5	---	---
20	22.0	13.5	25.5	20.5	31.5	24.5	21.5	17.5	29.5	23.0	---	---
21	18.0	14.5	25.0	19.5	29.0	25.0	27.0	19.0	---	---	---	---
22	16.5	12.0	24.5	17.5	30.0	22.0	26.0	20.5	---	---	---	---
23	19.0	11.5	25.5	17.0	29.0	21.5	27.5	22.0	---	---	---	---
24	14.0	10.0	24.5	19.0	29.5	22.0	25.5	23.0	---	---	---	---
25	17.0	11.0	20.0	16.0	32.5	24.5	27.0	21.5	---	---	---	---
26	16.5	12.0	16.0	14.0	29.5	25.0	26.5	23.5	---	---	---	---
27	13.0	10.5	15.5	13.0	32.0	24.0	25.0	20.0	---	---	---	---
28	13.5	10.0	18.5	13.5	33.0	23.5	24.0	19.0	---	---	---	---
29	13.0	9.5	21.5	16.0	32.5	23.0	26.5	20.5	---	---	---	---
30	17.5	10.5	24.0	17.5	32.5	24.5	23.5	20.0	---	---	---	---
31	---	---	25.5	20.0	---	---	25.5	18.5	---	---	---	---
MONTH	22.0	3.0	28.5	10.5	---	---	32.5	17.5	---	---	---	---
YEAR	33.0	0.0										

04196500 SANDUSKY RIVER NEAR UPPER SANDUSKY, OHIO

LOCATION.--Lat 40°51'02", long 83°15'23", in sec. 21 T.2 S., R.14 E., Wyandot County, at gaging station on left bank at downstream side of county road bridge, 0.7 mile downstream from unnamed right bank tributary, 0.8 mile upstream from Rock Run, and 2 miles northeast of Upper Sandusky.

DRAINAGE AREA.--298 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1969 to September 1971.
Water temperatures: June 1969 to September 1971.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.								
07...	1015	--	--	--	--	--	--	--
11...	2000	12	207	16	210	37	.9	7.9
18...	1900	61	176	0	100	26	.5	17
NOV.								
09...	1800	37	227	0	150	30	.6	11
29...	1600	67	230	11	160	48	.5	9.9
DEC.								
09...	1730	75	220	0	140	28	.7	17
FEB.								
28...	1730	493	116	0	65	20	.3	29
MAR.								
14...	2000	1120	111	0	64	22	.3	36
29...	1445	174	211	0	120	28	.3	23
APR.								
18...	1700	88	164	0	150	39	.4	3.5
28...	1930	45	236	0	180	36	.5	3.6
MAY								
06...	2000	2350	86	0	49	17	.3	42
23...	1800	106	230	0	120	27	.4	12
JUNE								
08...	1130	505	156	0	58	17	.3	42
30...	2030	41	244	0	160	32	.6	8.1
JULY								
08...	2130	17	220	0	212	47	.7	3.3
12...	2100	341	166	0	71	28	.3	16
AUG.								
01...	1630	26	260	0	140	39	.6	7.0
25...	1600	6.4	217	0	320	73	.8	5.7
SEP.								
06...	1330	5.8	220	10	310	76	.9	4.7
24...	1220	18	220	0	180	68	.6	5.9

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	667	590	836	821	756	495	786	777	---	---	480	418
2	695	659	844	826	507	485	786	780	---	---	513	480
3	706	687	842	829	561	507	783	772	---	---	537	513
4	723	696	839	733	612	560	786	711	---	---	574	537
5	766	723	748	722	633	587	711	592	---	---	608	513
6	806	766	722	695	605	552	592	522	---	---	648	608
7	831	780	712	694	620	567	---	---	---	---	624	512
8	849	780	733	709	664	620	---	---	---	---	528	454
9	870	832	754	733	699	664	---	---	---	---	519	471
10	867	843	776	754	705	683	---	---	---	---	574	519
11	868	811	784	768	686	658	---	---	---	---	602	574
12	870	831	804	783	660	558	---	---	---	---	596	495
13	831	667	822	804	558	395	---	---	---	---	495	408
14	834	721	830	815	439	396	---	---	---	---	466	420
15	742	573	830	808	526	439	749	722	---	---	486	446
16	577	544	857	830	590	526	771	719	---	---	484	474
17	594	568	858	757	660	590	763	740	---	---	480	472
18	588	561	784	753	680	659	773	734	---	---	482	474
19	636	588	783	747	682	679	766	734	---	---	486	477
20	678	636	747	729	684	680	767	726	---	---	522	484
21	702	677	767	743	695	677	839	767	---	---	526	520
22	724	702	776	766	707	695	918	839	297	234	528	522
23	729	712	804	776	700	655	920	862	261	237	540	525
24	746	721	846	804	656	556	861	846	330	242	---	---
25	741	705	870	837	582	558	---	---	435	330	611	576
26	771	741	881	870	653	582	---	---	428	360	627	590
27	794	769	870	849	689	653	---	---	368	345	636	627
28	826	791	849	836	730	689	---	---	418	364	---	---
29	832	826	839	685	737	722	---	---	---	---	630	627
30	826	808	762	727	780	729	---	---	---	---	635	629
31	835	817	---	---	812	780	---	---	---	---	644	630
MONTH	870	544	881	685	812	395	---	---	---	---	648	408

04196500 SANDUSKY RIVER NEAR UPPER SANDUSKY, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-70): Maximum, 1,210 micromhos Jan. 26, 1970; minimum, 200 micromhos June 18, 1970.

REMARKS.--Continuous water-quality recorder operated since June 1969. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water.

CHEMCIAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
07...	--	--	--	--	--	9.0	1.3
11...	558	400	210	847	8.5	--	--
18...	386	280	120	577	7.3	--	--
NOV.							
09...	498	340	150	747	8.2	--	--
29...	564	380	170	856	8.4	--	--
DEC.							
09...	466	330	150	690	8.2	--	--
FEB.							
28...	240	190	95	423	7.2	--	--
MAR.							
14...	260	190	99	436	7.2	--	--
29...	434	310	140	667	7.5	--	--
APR.							
13...	442	300	150	674	7.3	--	--
28...	512	370	160	785	7.3	--	--
MAY							
06...	232	160	68	376	7.7	--	--
23...	416	330	140	641	8.2	--	--
JUNE							
08...	306	230	100	443	7.2	28	3.9
30...	512	380	190	796	7.8	--	--
JULY							
08...	556	400	220	853	7.3	--	--
12...	302	230	94	496	7.6	--	--
AUG.							
01...	414	300	140	704	7.5	--	--
25...	756	480	300	1130	8.3	--	--
SEP.							
06...	752	470	270	1140	8.4	--	--
24...	512	330	150	833	7.3	--	--

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	666	630	810	774	---	---	---	---	719	686	1120	1060
2	659	641	810	794	---	---	---	---	714	704	1110	1080
3	645	635	815	789	---	---	---	---	---	---	1110	1080
4	662	630	822	795	---	---	---	---	---	---	1120	1080
5	660	645	---	---	---	---	---	---	---	---	1140	1100
6	657	635	---	---	---	---	---	---	---	---	1150	1010
7	666	638	---	---	---	---	---	---	---	---	1120	1010
8	666	644	---	---	509	468	---	---	---	---	1050	1020
9	666	650	---	---	708	508	---	---	---	---	1060	990
10	671	656	---	---	---	---	---	---	---	---	1010	990
11	672	657	---	---	---	---	---	---	846	725	1020	750
12	689	666	---	---	---	---	---	---	857	740	980	860
13	707	672	---	---	---	---	---	---	912	847	1000	960
14	701	672	612	586	---	---	---	---	929	879	1050	1000
15	718	657	647	612	707	695	---	---	961	922	1110	1050
16	756	689	674	646	741	696	---	---	961	908	1120	1080
17	772	752	689	672	714	654	---	---	1000	955	1130	1070
18	759	701	674	579	669	618	---	---	1020	979	1150	1100
19	704	674	630	582	629	626	---	---	1030	974	1160	1050
20	710	666	660	626	---	---	---	---	1050	991	1090	810
21	730	658	687	660	---	---	---	---	1060	1030	950	740
22	756	720	689	665	---	---	---	---	1080	1050	870	830
23	765	729	714	686	---	---	---	---	1100	1080	830	810
24	774	723	725	522	---	---	---	---	1140	1100	665	790
25	758	717	629	353	---	---	---	---	1170	1150	923	852
26	747	716	399	366	---	---	---	---	1180	1130	933	863
27	747	722	533	399	---	---	---	---	1160	1100	990	954
28	756	725	591	532	---	---	---	---	1100	1030	1010	863
29	776	750	693	591	---	---	---	---	1080	1050	987	884
30	788	741	720	689	---	---	725	683	1090	1070	1010	944
31	---	---	719	714	---	---	726	708	1100	1050	---	---
MONTH	788	630	---	---	---	---	---	---	---	---	1160	740

04196500 SANDUSKY RIVER NEAR UPPER SANDUSKY, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	10.5	5.5	7.4	6.1	7.5	6.6	---	---	7.6	7.1
2	---	---	8.1	4.1	8.4	6.8	7.2	6.1	---	---	7.7	7.1
3	---	---	7.9	4.4	8.9	7.8	7.4	6.0	---	---	8.2	7.7
4	---	---	10.0	6.1	9.4	8.2	6.4	4.6	---	---	8.2	7.6
5	---	---	10.1	7.7	9.9	7.6	7.2	5.1	---	---	8.2	6.5
6	---	---	10.5	7.6	9.7	8.2	7.2	6.5	---	---	6.9	5.3
7	---	---	11.3	7.7	10.2	9.1	---	---	---	---	6.2	5.6
8	---	---	12.0	7.9	9.8	8.8	---	---	---	---	6.2	5.4
9	---	---	12.9	6.9	9.8	8.7	---	---	---	---	5.8	5.1
10	---	---	10.0	6.4	10.0	8.7	---	---	---	---	5.2	4.3
11	---	---	9.8	5.6	8.9	6.5	---	---	---	---	---	---
12	---	---	7.7	4.9	8.3	5.7	---	---	---	---	---	---
13	---	---	8.2	5.5	6.8	5.4	---	---	---	---	---	---
14	---	---	9.9	5.7	7.0	5.6	---	---	---	---	---	---
15	---	---	10.7	6.9	7.1	6.4	---	---	---	---	---	---
16	---	---	11.2	8.5	7.3	5.1	---	---	---	---	---	---
17	---	---	10.5	8.0	7.7	5.1	---	---	---	---	---	---
18	---	---	9.0	8.0	8.4	7.1	---	---	---	---	---	---
19	---	---	8.9	7.6	7.8	6.5	---	---	---	---	---	---
20	---	---	7.6	6.6	8.5	7.7	---	---	---	---	---	---
21	---	---	8.8	6.7	8.8	7.7	---	---	---	---	---	---
22	---	---	9.0	7.4	8.3	6.1	---	---	8.7	7.2	---	---
23	---	---	10.1	7.9	7.8	6.6	---	---	8.4	5.9	---	---
24	---	---	10.5	8.8	8.0	6.4	---	---	8.5	6.8	---	---
25	---	---	10.7	9.3	8.1	7.3	---	---	7.3	6.5	---	---
26	---	---	10.2	8.8	8.6	7.2	---	---	7.1	6.4	---	---
27	11.3	6.1	9.8	7.9	8.6	7.5	---	---	7.1	6.6	---	---
28	11.8	5.7	9.1	7.3	8.5	6.3	---	---	7.2	6.5	---	---
29	6.9	3.2	8.5	6.1	9.0	6.4	---	---	---	---	---	---
30	10.8	4.2	9.5	6.2	8.1	4.8	---	---	---	---	---	---
31	10.9	5.2	---	---	7.5	5.7	---	---	---	---	---	---
MONTH	---	---	12.9	4.1	10.2	4.8	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	15.0	6.2	---	---
2	---	---	---	---	---	---	---	---	15.0	7.0	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	5.9	4.4	---	---	---	---	---	---
9	---	---	---	---	5.3	3.6	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	7.7	6.5	---	---	---	---	---	---	---	---
15	---	---	9.4	5.4	8.6	6.0	---	---	---	---	---	---
16	---	---	8.2	5.1	14.7	6.0	---	---	---	---	---	---
17	---	---	8.4	4.8	15.0	7.0	---	---	---	---	---	---
18	---	---	7.5	3.5	15.0	5.8	---	---	---	---	---	---
19	---	---	4.8	3.3	6.6	4.7	---	---	---	---	---	---
20	---	---	4.8	3.1	---	---	---	---	---	---	---	---
21	---	---	6.2	3.7	---	---	---	---	---	---	---	---
22	---	---	7.6	4.8	---	---	---	---	---	---	---	---
23	---	---	9.9	6.0	---	---	---	---	---	---	---	---
24	---	---	9.4	3.7	---	---	---	---	---	---	---	---
25	---	---	11.1	3.7	---	---	---	---	---	---	---	---
26	---	---	7.8	3.7	---	---	---	---	---	---	---	---
27	---	---	7.8	3.2	---	---	---	---	---	---	---	---
28	---	---	8.3	5.2	---	---	---	---	---	---	---	---
29	---	---	8.5	4.5	---	---	---	---	---	---	---	---
30	---	---	7.5	3.4	---	---	7.8	5.4	---	---	---	---
31	---	---	5.6	2.2	---	---	11.4	4.5	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

04196500 SANDUSKY RIVER NEAR UPPER SANDUSKY, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	15.0	15.5	13.0	---	---	---	---	---	---	---	---
2	18.5	15.0	13.5	12.5	---	---	---	---	---	---	---	---
3	18.0	15.0	12.5	12.0	---	---	---	---	---	---	---	---
4	18.0	14.0	12.0	11.0	---	---	---	---	---	---	---	---
5	18.5	13.5	11.0	10.5	---	---	---	---	---	---	---	---
6	20.0	15.0	12.0	10.0	---	---	---	---	---	---	---	---
7	19.0	16.0	12.5	10.5	---	---	---	---	---	---	---	---
8	21.0	16.5	13.0	10.5	---	---	---	---	---	---	---	---
9	22.0	17.5	13.0	11.0	---	---	---	---	---	---	---	---
10	20.5	15.5	14.5	13.0	---	---	---	---	---	---	---	---
11	18.5	15.0	15.0	12.5	---	---	---	---	---	---	---	---
12	17.5	16.0	13.0	12.0	---	---	---	---	---	---	---	---
13	19.0	17.5	12.0	11.0	---	---	---	---	---	---	---	---
14	19.5	18.0	11.0	8.5	---	---	---	---	---	---	---	---
15	19.5	18.0	9.0	7.5	---	---	0.5	0.0	---	---	---	---
16	17.5	15.0	8.0	7.0	---	---	1.0	0.0	---	---	---	---
17	15.5	13.5	7.0	6.5	---	---	1.5	0.0	---	---	---	---
18	15.5	13.5	7.5	6.5	---	---	---	---	---	---	---	---
19	---	---	8.0	7.0	---	---	---	---	---	---	---	---
20	---	---	9.0	8.0	---	---	1.0	0.5	---	---	---	---
21	---	---	9.0	7.5	---	---	0.5	0.0	---	---	---	---
22	---	---	8.0	7.0	---	---	0.5	0.0	---	---	---	---
23	---	---	7.0	4.5	---	---	0.5	0.0	---	---	---	---
24	---	---	5.0	4.0	---	---	0.5	0.0	---	---	---	---
25	---	---	5.0	4.5	---	---	---	---	---	---	---	3.0
26	---	---	---	---	---	---	---	---	---	---	---	---
27	16.0	14.5	---	---	---	---	---	---	---	---	---	---
28	15.0	14.0	---	---	---	---	---	---	---	---	---	---
29	15.0	14.0	---	---	---	---	---	---	---	---	---	5.0
30	16.0	14.0	---	---	---	---	---	---	---	---	7.0	5.0
31	16.5	14.0	---	---	---	---	---	---	---	---	8.0	6.0
MONTH	---	---	15.5	4.0	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	7.5	12.5	10.0	---	---	---	---	26.5	20.0	---	---
2	8.0	6.5	13.5	11.5	---	---	---	---	24.5	21.5	24.0	21.0
3	7.0	5.5	14.5	11.5	---	---	---	---	---	---	23.5	21.0
4	7.0	5.0	15.0	10.0	---	---	---	---	---	---	28.5	21.5
5	7.0	6.0	---	---	---	---	---	---	---	---	29.5	22.0
6	9.0	6.5	---	---	---	---	---	---	---	---	28.0	22.0
7	10.5	7.5	---	---	---	---	---	---	---	---	29.0	22.0
8	13.0	9.0	---	---	20.5	19.5	---	---	---	---	29.0	22.0
9	14.5	11.0	---	---	23.0	17.5	---	---	---	---	27.5	22.5
10	14.0	11.0	---	---	---	---	---	---	---	---	28.0	21.5
11	15.0	10.5	---	---	---	---	---	---	29.5	22.0	23.5	21.5
12	17.5	12.5	---	---	---	---	---	---	29.0	20.0	24.5	20.0
13	16.5	13.5	---	---	---	---	---	---	28.5	19.5	21.5	15.5
14	15.5	13.0	15.0	13.5	---	---	---	---	28.5	20.0	27.0	18.0
15	16.5	10.5	20.5	15.0	25.5	20.5	---	---	26.0	21.5	26.0	19.0
16	13.0	10.5	22.5	20.5	26.5	20.5	---	---	29.0	19.5	26.0	17.5
17	14.5	11.0	24.5	20.5	27.5	23.0	---	---	30.0	18.0	22.0	17.5
18	16.5	13.0	27.5	19.5	28.5	23.5	---	---	29.0	18.5	25.5	16.5
19	17.5	14.0	21.0	19.0	25.0	25.0	---	---	26.5	19.5	21.0	18.0
20	17.5	12.5	21.0	19.0	---	---	---	---	27.0	21.0	20.0	17.5
21	15.0	12.0	20.5	18.5	---	---	---	---	---	---	23.0	16.0
22	14.5	11.5	19.5	17.5	---	---	---	---	---	---	20.5	16.5
23	14.5	11.5	20.0	17.0	---	---	---	---	---	---	22.0	16.5
24	14.5	10.5	20.0	17.0	---	---	---	---	---	---	18.5	15.5
25	15.0	10.5	18.0	15.5	---	---	---	---	---	---	15.0	12.5
26	14.5	11.0	21.0	16.0	---	---	---	---	---	---	17.5	14.0
27	12.0	10.5	21.5	17.0	---	---	---	---	---	---	20.0	15.0
28	13.0	11.0	19.5	16.5	---	---	---	---	---	---	23.0	17.0
29	12.0	10.5	23.5	18.5	---	---	---	---	---	---	24.5	18.5
30	13.0	10.5	24.0	21.5	---	---	22.0	21.0	---	---	25.0	19.5
31	---	---	---	---	---	---	25.5	20.5	---	---	---	---
MONTH	17.5	5.0	---	---	---	---	---	---	---	---	29.5	12.5

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO

LOCATION.--Lat 40°55'22", long 83°20'56", in SE 1/4 sec.27, T.1 S., R.13 E., Wyandot County, at gaging station on right bank at downstream side of bridge on State Highway 199 (formerly U.S. Highway 23), 0.4 mile northwest of Crawford, 1.5 miles downstream from Lick Run, 2.7 miles upstream from Little Tymochtee Creek, and 3 miles southeast of Carey.

DRAINAGE AREA.--229 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1968 to September 1971.
Water temperatures: January 1968 to September 1971.
Sediment records: Water years 1970-71 (partial- record station).

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,500 micromhos Nov. 24, 25, 27; minimum, 192 micromhos Feb. 24.
pH: Maximum, 9.2 July 21; minimum, 6.8 Jan. 31, Sept. 4.
Dissolved oxygen: Maximum, 14.4 mg/l Dec. 10; minimum, 3.3 mg/l Aug. 20.
Water temperatures: Maximum, 29.5°C June 28; minimum, freezing point Nov. 25.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.							
07...	1045	--	--	--	--	--	--
14...	1800	7.7	201	0	410	22	.4
27...	1240	3.9	229	0	500	25	.5
NOV.							
04...	1630	1.6	236	0	460	25	.5
DEC.							
10...	1430	2.2	220	0	490	38	.5
24...	1300	100	144	0	160	26	.2
JAN.							
11...	1400	37	182	0	190	28	.4
28...	1800	24	131	0	290	38	.5
FEB.							
17...	1200	240	87	0	80	98	.3
22...	1500	1390	56	0	31	9.6	.2
MAR.							
03...	1200	230	110	0	82	17	.1
31...	1100	60	179	6	170	22	.1
APR.							
06...	0800	42	191	0	190	24	.5
28...	1500	18	188	0	220	29	.5
MAY							
04...	1300	19	126	0	290	28	.5
10...	1025	19	104	0	74	20	.2
21...	1345	--	--	--	--	--	--
JUNE							
01...	0940	45	178	6	140	21	.3
23...	1415	7.7	225	0	250	30	.5
JULY							
07...	1045	3.9	260	0	320	34	.7
15...	1700	43	100	0	77	15	.3
AUG.							
04...	1100	3.4	204	0	240	23	.5
26...	0900	.10	180	8	440	32	.8
SEP.							
10...	1300	.40	192	0	440	30	.7
16...	0800	2.4	198	0	330	28	.6

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-71): Maximum, 1,500 micromhos Jan. 28, Nov. 24, 25, 27, 1970; minimum, 192 micromhos Feb. 24, 1971.
pH (1969-71): Maximum, 9.2 July 22, 1970, July 21, 1971; minimum, 5.5 Feb. 5, 1970.
Dissolved oxygen (1969-71): Maximum, 15.0 mg/l on several days during December 1969, January and July 1970; minimum, 2.4 mg/l Aug. 22, 1970.
Water temperatures (1969-71): Maximum, 30.0°C July 1, 1970; minimum, freezing point on many days during December 1969 to February 1970, and Nov. 28, 1970.

REMARKS.--Continuous water-quality recorder operated since January 1968. Minimum recorded specific conductance value of 170 micromhos occurred May 19, 1969. Minimum recorded pH of 5.2 occurred Aug. 20, 1969. Minimum recorded dissolved oxygen concentrations of 1.5 mg/l occurred Aug. 25, 1968 and Aug. 20, 1969. Specific conductance values listed as 1,500 micromhos represent values of 1,500 micromhos or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. Sediment records for this station on page 402.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
07...	--	--	--	--	--	1[illegible]	1.9
14...	3.0	658	590	420	1110	--	--
27...	3.7	998	690	500	1280	--	--
NOV.							
04...	1.1	876	650	460	1190	--	--
DEC.							
10...	12	878	540	360	1080	--	--
24...	41	444	290	170	638	--	--
JAN.							
11...	32	546	360	211	748	--	--
28...	10	610	400	292	959	--	--
FEB.							
17...	14	402	170	98	648	--	--
22...	21	152	90	44	223	--	--
MAR.							
03...	37	310	200	110	455	--	--
31...	28	478	350	190	693	--	--
APR.							
06...	12	493	370	210	748	--	--
28...	3.8	550	400	240	836	--	--
MAY							
04...	2.1	586	400	300	942	--	--
10...	67	334	230	140	495	--	--
21...	--	--	--	--	--	--	1.5
JUNE							
01...	40	438	340	180	659	--	--
23...	8.0	610	460	280	869	--	--
JULY							
07...	2.7	726	540	330	1030	--	--
15...	77	324	220	140	484	--	--
AUG.							
04...	7.0	584	410	240	795	--	--
26...	2.1	888	610	450	1150	--	--
SEP.							
10...	2.1	888	610	450	1120	--	--
16...	1.8	708	490	330	968	--	--

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1140	1080	1280	1250	---	---	839	797	1060	1030	434	377
2	1130	1090	1280	1230	---	---	881	839	1100	1060	477	431
3	1120	1090	1230	1200	---	---	907	737	1160	825	496	474
4	1150	1120	1220	1190	960	912	844	698	825	205	568	491
5	1180	1140	1220	1190	990	927	701	646	423	296	614	568
6	1190	1160	1260	1220	---	---	758	701	407	275	638	593
7	1200	1170	1270	1240	960	930	722	626	338	284	593	517
8	1210	1170	1260	1250	987	900	626	596	408	338	530	475
9	1220	1150	1260	1250	1030	945	668	612	461	408	532	463
10	1240	1160	1270	1250	1060	1030	718	668	684	461	565	523
11	1280	1240	1320	1250	1080	1050	764	718	752	367	600	565
12	1260	1190	1330	1310	1070	465	782	764	495	356	612	537
13	1220	1140	1330	1320	579	475	857	782	450	421	537	477
14	1150	1100	---	---	752	588	857	842	557	435	492	430
15	1150	1080	---	---	720	602	848	806	536	452	456	429
16	1140	1080	1280	1270	653	603	917	818	741	455	487	456
17	1180	1140	1310	1280	641	626	957	917	656	219	483	468
18	1200	1140	1310	1300	650	624	934	885	286	209	540	483
19	1220	1160	1330	1310	682	650	914	894	270	201	560	540
20	1230	1170	1330	1280	702	682	920	905	216	196	563	545
21	1210	1170	1300	1260	737	702	921	900	243	216	550	511
22	1230	1160	1350	1200	785	732	972	898	284	233	536	513
23	1240	1200	1440	1350	718	617	907	881	293	228	569	536
24	1260	1220	1500	1440	678	615	902	889	245	192	594	569
25	1270	1220	1500	1500	629	565	960	889	315	204	619	594
26	1300	1230	---	---	601	570	948	925	355	311	641	617
27	1290	1280	1500	1440	635	600	974	947	365	347	662	641
28	---	---	1440	1320	691	635	980	962	378	351	675	662
29	1290	1190	1350	1170	714	690	975	965	---	---	686	675
30	1290	1270	1340	1040	754	714	971	956	---	---	704	686
31	1270	1240	---	---	797	754	1030	975	---	---	713	704
MONTH	1300	1080	1500	1040	1080	465	1030	596	1160	192	713	377

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	728	714	883	868	694	685	855	813	726	701	1120	1020
2	744	727	906	881	730	694	889	828	749	720	1100	1080
3	762	741	932	906	753	730	915	888	780	726	1100	1090
4	771	753	954	924	766	753	934	897	792	761	1110	1090
5	771	749	954	910	770	761	952	903	768	740	1110	1100
6	801	770	---	---	768	739	990	900	762	708	1130	1090
7	811	777	---	---	763	753	1020	912	774	741	1130	1090
8	806	769	---	---	792	761	990	907	780	726	1100	1070
9	817	779	---	---	820	792	---	---	812	705	1110	1060
10	779	729	547	514	826	743	---	---	815	761	1120	1090
11	766	732	592	547	742	689	---	---	802	764	1090	1060
12	750	720	619	592	766	721	921	888	823	781	1070	1020
13	777	735	624	477	781	766	946	873	854	780	1020	939
14	782	762	550	474	811	781	873	466	886	843	1000	934
15	786	767	600	550	834	750	510	466	924	851	972	954
16	810	768	631	600	828	779	546	508	932	900	976	943
17	772	744	661	631	815	750	576	546	948	923	965	940
18	759	742	694	661	798	770	604	573	959	942	995	957
19	750	726	699	678	804	780	613	591	972	948	1020	995
20	768	743	697	688	824	790	624	595	1000	951	1040	975
21	762	752	---	---	825	750	639	613	1030	991	1020	946
22	770	759	---	---	833	810	666	637	1050	1010	1010	956
23	768	743	---	---	874	832	687	651	1110	1050	1010	921
24	753	735	---	---	883	826	664	625	1150	1100	1030	959
25	---	---	---	---	867	817	702	664	1150	1130	1010	983
26	837	827	---	---	859	822	720	685	1160	1120	993	952
27	838	824	---	---	841	792	736	693	1170	1140	963	906
28	844	834	---	---	834	774	715	675	1150	1030	1060	872
29	864	844	---	---	840	810	728	704	1060	1010	1020	993
30	869	856	---	---	834	807	726	707	1030	999	1040	1020
31	---	---	---	---	---	---	722	696	1040	991	---	---
MONTH	869	714	---	---	883	685	1020	466	1170	701	1130	872
YEAR	1500	192										

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.0	7.6	7.4	---	---	7.3	7.1	7.1	6.9	---	---
2	8.6	8.1	7.6	7.4	---	---	7.4	7.1	7.1	6.9	---	---
3	8.5	8.1	7.6	7.5	---	---	7.4	7.1	7.2	6.9	---	---
4	8.5	8.1	7.9	7.6	7.6	7.4	7.2	7.0	6.9	---	7.7	7.3
5	8.5	8.2	7.8	7.6	7.6	7.5	7.3	7.0	---	---	7.9	7.7
6	8.5	8.2	8.0	7.8	---	---	7.2	7.0	---	---	7.9	7.7
7	8.4	8.0	7.9	7.8	8.0	7.6	7.1	7.0	---	---	7.7	7.5
8	8.4	8.0	8.0	7.8	8.0	7.8	7.0	6.9	---	---	7.6	7.5
9	8.3	8.0	7.9	7.8	7.8	7.8	7.1	6.9	---	---	7.8	7.5
10	8.1	7.5	7.9	7.7	7.8	7.6	7.2	6.9	---	---	7.8	7.6
11	8.0	7.7	7.8	7.7	7.7	7.5	7.3	7.0	---	---	7.9	7.7
12	7.9	7.8	7.8	7.6	7.6	7.0	7.3	7.0	---	---	8.0	7.7
13	7.9	7.7	7.7	7.5	7.2	7.0	7.3	7.1	---	---	7.9	7.2
14	8.0	7.6	---	---	7.5	7.2	7.4	7.1	---	---	7.8	7.6
15	7.9	7.6	---	---	7.4	7.2	7.4	7.0	---	---	7.7	7.6
16	8.2	7.8	8.0	8.0	7.3	7.0	7.5	7.2	---	---	7.7	7.6
17	8.4	8.0	8.0	7.9	7.2	7.0	7.5	7.3	---	---	7.8	7.6
18	8.4	8.0	8.0	8.0	7.3	7.2	7.5	7.2	---	---	8.1	7.7
19	8.4	8.0	8.1	8.0	7.3	7.2	7.5	7.1	---	---	8.1	7.9
20	8.1	8.0	8.0	7.9	7.5	7.3	7.5	7.2	---	---	8.1	7.9
21	8.0	7.9	8.1	7.6	7.6	7.4	7.3	7.1	---	---	8.1	8.0
22	8.0	7.8	8.1	7.6	7.5	7.2	7.5	7.1	---	---	8.0	7.8
23	8.0	7.7	8.1	7.5	7.4	7.2	7.4	7.1	---	---	8.1	7.8
24	8.0	7.8	8.1	7.5	7.5	7.2	7.2	7.1	---	---	8.1	7.4
25	8.0	7.8	8.6	8.0	7.4	7.0	7.6	7.1	---	---	8.3	8.0
26	8.0	7.8	---	---	7.2	7.0	7.4	7.1	---	---	8.1	8.0
27	7.9	7.8	8.0	7.9	7.2	7.1	7.2	7.0	---	---	8.3	8.1
28	---	---	8.0	7.4	7.2	7.0	7.2	7.0	---	---	8.2	8.2
29	7.6	7.4	8.0	7.5	7.2	7.0	7.1	7.0	---	---	8.2	8.0
30	7.6	7.3	7.8	7.5	7.2	7.0	7.1	6.9	---	---	8.2	8.0
31	7.6	7.4	---	---	7.2	7.0	7.1	6.8	---	---	8.3	8.0
MONTH	8.6	7.3	8.6	7.4	8.0	7.0	7.6	6.8	---	---	8.3	7.2

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.2	7.9	8.9	8.6	8.3	8.0	8.4	7.6	9.0	7.9	7.6	7.4
2	8.2	7.9	8.8	8.6	8.3	8.0	8.4	7.6	9.0	7.8	7.7	7.2
3	8.3	8.0	8.8	8.4	8.4	8.1	8.4	7.5	8.2	7.7	7.5	7.2
4	8.4	8.1	8.8	8.5	8.5	8.2	8.4	7.6	8.1	7.4	7.7	6.8
5	8.3	8.0	8.8	8.6	8.6	8.1	8.4	7.5	8.6	7.9	7.6	7.3
6	8.5	8.2	---	---	8.5	8.0	8.6	7.6	8.6	7.8	7.5	7.3
7	8.6	8.3	---	---	8.7	8.1	8.1	7.6	8.8	7.6	7.6	7.2
8	8.8	8.2	---	---	8.3	8.1	8.7	7.5	8.6	7.5	7.7	7.2
9	8.7	8.2	---	---	8.4	8.1	---	---	8.7	7.2	7.6	7.3
10	8.8	8.1	7.9	7.6	8.5	8.2	---	---	8.7	7.3	7.6	7.3
11	8.9	8.2	8.0	7.7	8.3	7.9	---	---	8.3	7.4	7.6	7.2
12	8.9	8.3	8.0	7.8	8.4	7.5	8.8	8.4	8.2	7.2	7.6	7.2
13	8.7	8.2	7.9	7.7	8.4	8.0	8.4	7.9	8.1	7.1	7.5	7.2
14	8.6	8.2	8.0	7.6	8.4	8.0	8.0	7.5	8.3	7.2	8.0	7.2
15	8.8	8.3	8.1	7.8	8.4	8.0	7.9	7.4	7.9	7.3	7.8	7.5
16	8.8	8.3	8.2	7.9	8.3	8.0	8.1	7.4	8.0	7.5	7.8	7.4
17	8.7	8.2	8.2	8.0	8.2	7.9	8.1	7.6	8.0	7.6	7.7	7.5
18	8.7	8.1	8.3	8.2	8.1	7.5	8.4	7.5	8.0	7.6	7.8	7.5
19	8.8	8.1	8.3	7.5	8.1	7.5	8.3	7.8	7.9	7.5	7.8	7.5
20	8.7	8.2	8.5	8.0	8.0	7.7	9.0	7.8	7.9	7.6	7.7	7.5
21	8.4	8.2	---	---	7.9	7.8	9.2	8.0	7.8	7.5	7.8	7.6
22	8.4	8.1	---	---	7.9	7.8	8.8	8.1	7.8	7.5	7.9	7.4
23	8.5	8.1	---	---	8.8	7.9	8.7	8.0	7.5	7.4	7.9	7.5
24	8.4	8.0	---	---	8.9	7.7	8.7	7.6	7.9	7.2	7.8	7.5
25	---	---	---	---	8.7	7.5	8.8	7.8	8.1	7.6	7.8	7.4
26	8.5	8.3	---	---	8.9	7.6	8.5	7.7	7.8	7.3	7.9	7.5
27	8.6	8.1	---	---	8.8	7.8	8.5	7.7	7.5	7.0	7.9	7.6
28	8.5	8.2	---	---	8.6	7.6	8.8	8.0	7.7	7.3	7.7	7.5
29	8.5	8.1	---	---	8.3	7.5	8.8	7.8	7.8	7.4	7.7	7.4
30	8.6	8.2	---	---	8.9	7.6	8.2	7.7	7.9	7.4	7.7	7.2
31	---	---	---	---	---	---	8.9	7.8	7.7	7.4	---	---
MONTH	8.9	7.9	---	---	8.9	7.5	9.2	7.4	9.0	7.0	8.0	6.8
YEAR	9.2	6.8										

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.8	9.0	9.3	7.3	---	---	12.8	11.9	10.2	9.6	---	---
2	10.4	9.2	9.1	8.0	---	---	12.8	11.7	9.9	8.2	---	---
3	10.3	8.8	9.1	8.5	---	---	13.0	11.8	8.6	7.5	---	---
4	10.2	9.0	10.0	9.1	9.4	7.8	11.8	11.4	10.0	8.2	11.2	9.4
5	10.2	9.1	10.9	9.6	9.8	7.5	12.3	11.7	10.3	9.9	11.2	10.5
6	9.8	8.8	11.5	10.3	---	---	12.2	12.1	10.2	9.8	10.8	10.5
7	9.8	8.4	10.9	10.2	10.5	9.8	12.4	12.2	9.8	8.9	11.2	10.7
8	9.6	7.4	10.8	9.8	10.4	9.2	12.2	11.9	8.8	8.2	11.8	11.2
9	9.4	8.0	10.6	9.6	9.6	9.3	11.9	11.4	8.2	7.8	12.5	9.7
10	9.0	7.6	10.4	9.1	14.4	9.6	12.2	11.1	8.0	7.6	12.3	12.1
11	8.6	6.9	9.4	8.5	13.1	12.0	12.2	11.1	10.0	8.0	12.6	12.3
12	8.0	6.7	8.8	8.1	12.3	11.8	12.8	12.0	10.0	7.8	12.8	12.2
13	8.0	6.2	9.6	7.8	12.4	12.0	12.1	11.9	8.5	7.9	12.7	11.6
14	9.5	6.3	---	---	12.7	12.4	12.4	11.5	8.3	7.2	12.1	11.1
15	9.4	7.4	---	---	13.0	12.6	13.6	11.7	8.6	8.0	11.3	9.0
16	11.6	8.9	12.5	12.3	13.1	12.3	13.7	11.5	8.2	7.7	10.2	9.0
17	11.7	10.0	12.4	11.8	12.5	12.1	13.2	11.5	11.1	7.8	11.4	9.5
18	10.8	9.9	12.3	11.6	12.5	12.4	13.3	11.5	11.5	10.3	12.0	10.9
19	11.0	9.9	12.5	11.5	12.4	12.0	13.6	11.1	11.8	11.4	11.7	11.3
20	10.0	9.2	11.8	10.8	12.4	12.0	13.8	10.9	12.0	11.6	11.9	11.4
21	9.3	7.5	12.1	10.6	12.8	12.3	12.2	10.7	11.9	10.3	11.9	11.2
22	9.6	7.9	12.0	10.6	12.6	11.8	12.6	10.5	---	---	11.6	10.7
23	9.7	8.0	13.3	11.7	12.1	11.7	13.2	10.4	---	---	12.1	11.6
24	9.4	8.4	13.6	12.0	12.8	12.1	11.7	9.9	---	---	12.2	11.8
25	9.3	8.2	12.9	10.2	13.8	12.8	13.4	9.8	---	---	12.2	11.8
26	8.9	7.8	---	---	13.2	12.8	14.0	9.9	---	---	12.2	11.7
27	8.2	7.4	8.6	8.1	12.8	12.5	12.1	9.3	---	---	12.0	11.3
28	---	---	8.6	7.9	12.7	12.5	12.2	9.4	---	---	11.5	10.7
29	7.7	6.7	8.7	7.9	12.8	12.4	11.3	10.0	---	---	11.3	10.6
30	8.2	5.7	8.2	7.8	12.9	12.2	12.8	9.4	---	---	12.0	10.7
31	8.8	6.7	---	---	13.1	12.1	12.1	9.9	---	---	13.1	10.6
MONTH	11.7	5.7	13.6	7.3	14.4	7.5	14.0	9.3	---	---	13.1	9.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.0	12.8	10.1	---	---	8.0	3.7	11.8	6.0	7.2	5.0
2	11.7	10.0	12.7	9.8	---	---	8.2	3.8	11.7	5.5	8.6	5.6
3	12.3	11.2	12.5	9.9	---	---	8.4	4.8	9.5	5.2	9.1	5.0
4	12.9	10.5	12.9	9.7	7.7	6.3	8.3	4.4	9.9	4.7	8.7	4.8
5	12.9	10.5	12.4	9.4	8.0	6.0	7.0	3.6	13.2	7.2	9.3	5.4
6	13.4	10.2	---	---	8.0	6.0	8.4	3.6	14.1	7.3	8.8	5.4
7	14.0	9.5	---	---	8.7	6.0	9.3	3.4	13.8	7.0	9.8	4.7
8	13.3	8.2	---	---	7.4	6.0	8.9	4.5	12.2	6.8	10.2	6.1
9	11.6	7.8	---	---	8.7	6.5	---	---	9.7	5.7	9.6	5.8
10	11.8	7.6	8.0	7.6	9.4	6.7	---	---	8.1	5.5	8.7	5.4
11	11.5	7.4	8.4	7.6	8.1	6.4	---	---	8.3	4.0	8.5	4.5
12	10.4	6.6	8.4	7.5	8.6	5.9	11.5	7.3	7.9	4.1	9.0	4.5
13	8.6	6.0	10.1	8.0	8.4	5.6	7.3	3.9	7.5	4.3	8.7	4.8
14	10.5	5.9	9.7	8.6	9.4	5.6	5.5	4.9	7.5	4.6	11.1	4.9
15	12.2	9.1	9.4	8.6	10.2	5.6	5.8	4.8	6.4	4.1	8.1	5.7
16	12.6	10.1	9.6	8.2	11.0	5.9	6.5	5.5	6.5	4.1	8.3	5.7
17	11.9	9.3	9.5	8.8	11.1	6.4	7.1	5.6	6.0	3.8	8.0	6.1
18	12.5	9.2	9.5	8.5	10.9	6.2	7.8	5.6	5.7	4.3	8.3	6.4
19	12.7	9.3	9.4	8.0	10.6	5.5	9.0	5.6	4.8	3.8	9.1	6.1
20	12.2	9.5	9.8	7.5	10.0	5.2	9.8	5.8	7.1	3.3	9.5	6.4
21	11.1	9.3	---	---	8.8	4.4	11.3	6.3	7.2	5.0	9.9	6.3
22	11.0	8.5	---	---	7.6	5.2	10.2	5.9	7.1	5.2	11.0	6.6
23	10.4	7.9	---	---	11.5	6.9	9.7	5.6	8.2	5.4	10.8	6.8
24	10.2	7.8	---	---	11.2	6.0	9.2	5.6	8.1	6.0	11.1	6.8
25	---	---	---	---	10.6	6.3	10.3	5.8	9.2	6.4	10.8	7.1
26	11.6	10.0	---	---	10.7	4.1	9.4	5.5	8.7	6.1	10.4	6.8
27	12.3	9.5	---	---	10.7	6.1	10.4	6.2	9.1	5.1	10.3	7.0
28	12.0	9.4	---	---	8.7	5.7	10.4	5.9	8.3	5.3	11.3	5.8
29	13.5	9.4	---	---	6.2	5.1	11.4	4.9	8.3	5.9	11.2	5.9
30	13.2	10.1	---	---	8.0	4.6	8.1	4.9	8.5	5.9	11.1	5.9
31	---	---	---	---	---	---	11.1	5.2	8.6	5.0	---	---
MONTH	14.0	5.9	---	---	11.5	4.1	11.5	3.4	14.1	3.3	11.3	4.5
YEAR	14.4	3.3										

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	13.5	13.0	12.0	---	---	1.0	0.5	1.0	0.5	4.5	3.5
2	16.5	13.0	12.0	10.5	---	---	1.0	0.5	0.5	0.5	4.5	3.5
3	15.5	14.0	10.5	9.0	---	---	1.5	0.5	1.0	0.5	4.0	2.5
4	15.0	12.0	9.5	8.0	---	---	1.5	1.0	0.5	0.5	2.5	1.0
5	15.5	12.0	8.5	7.5	1.5	1.0	1.0	0.5	0.5	0.5	2.5	1.0
6	17.5	14.0	10.0	7.0	---	---	0.5	0.5	0.5	0.5	3.0	2.5
7	18.0	15.5	10.5	8.5	2.0	0.5	0.5	0.5	1.0	0.5	2.5	1.5
8	19.0	16.0	10.5	8.5	2.5	0.5	0.5	0.5	0.5	0.5	2.0	1.0
9	20.5	17.5	11.5	9.5	1.0	0.5	0.5	0.5	0.5	0.5	2.0	0.5
10	19.0	16.5	13.0	11.5	3.5	1.0	0.5	0.5	0.5	0.5	2.0	1.5
11	16.5	14.0	12.0	10.5	4.0	3.0	0.5	0.5	1.0	0.5	2.0	1.5
12	15.5	14.5	12.0	11.0	4.5	3.5	1.0	0.5	1.0	0.5	3.0	1.5
13	17.0	15.0	11.0	10.0	4.0	3.0	0.5	0.5	0.5	0.5	3.5	2.5
14	18.0	16.5	---	---	3.0	2.5	1.5	0.5	0.5	0.5	5.5	3.5
15	17.0	12.5	---	---	2.5	1.5	1.0	0.5	0.5	0.5	7.0	5.5
16	15.0	10.0	4.5	3.5	2.5	1.5	0.5	0.5	1.0	0.5	6.5	5.5
17	11.5	8.5	5.0	3.5	2.5	2.0	0.5	0.5	1.0	0.5	5.5	4.0
18	12.0	9.0	5.5	4.5	2.5	2.0	0.5	0.5	0.5	0.5	4.0	3.0
19	12.0	9.5	5.5	4.5	3.5	2.5	0.5	0.5	0.5	0.5	3.5	3.0
20	12.0	11.0	7.0	5.5	3.5	2.0	0.5	0.5	0.5	0.5	3.5	2.5
21	12.5	11.5	5.0	4.0	2.0	1.5	0.5	0.5	---	---	4.0	2.0
22	13.5	12.0	6.0	1.0	3.0	1.5	0.5	0.5	---	---	4.0	3.5
23	13.5	11.5	3.0	0.5	3.5	2.5	0.5	0.5	---	---	3.5	2.5
24	14.0	10.5	2.5	1.0	2.5	1.0	0.5	0.5	---	---	4.0	2.0
25	14.0	12.5	2.0	0.0	2.5	0.5	1.0	0.5	2.0	0.5	4.0	2.0
26	15.5	13.0	---	---	0.5	0.5	1.0	0.5	3.5	2.0	5.5	2.5
27	14.5	15.0	2.5	2.0	0.5	0.5	0.5	0.5	4.5	3.5	5.5	3.5
28	---	---	1.0	0.5	0.5	0.5	0.5	0.5	4.5	3.5	7.5	5.0
29	14.0	12.0	1.5	1.0	1.0	0.5	0.5	0.5	---	---	7.0	5.5
30	13.0	12.0	1.5	1.0	0.5	0.5	1.0	0.5	---	---	8.0	4.5
31	14.0	12.0	---	---	1.0	0.5	1.0	0.5	---	---	9.0	5.5
MONTH	20.5	8.5	13.0	0.0	4.5	0.5	1.5	0.5	4.5	0.5	9.0	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	7.0	14.0	9.0	21.0	17.5	28.5	24.5	23.0	19.0	22.5	20.5
2	8.0	6.0	12.5	10.0	21.5	17.5	26.0	22.5	25.0	20.5	22.5	21.5
3	7.5	5.0	16.0	9.0	23.5	18.5	25.5	20.0	24.0	22.0	23.0	21.0
4	8.0	4.5	15.5	9.0	26.0	22.0	26.0	21.0	22.5	20.5	25.0	21.5
5	7.5	4.5	14.5	11.0	27.5	22.0	25.5	22.5	23.0	18.5	25.0	22.0
6	8.5	4.0	---	---	26.5	22.0	26.5	22.5	23.0	19.0	24.0	22.5
7	11.0	4.0	---	---	27.0	22.0	27.5	22.0	23.5	19.5	25.5	22.0
8	13.0	5.5	---	---	24.0	20.5	26.5	22.5	24.0	20.5	26.0	22.5
9	13.5	8.0	---	---	23.0	18.5	---	---	25.0	21.0	26.0	23.0
10	14.5	8.0	15.0	14.0	24.0	17.0	---	---	27.0	23.0	24.5	21.5
11	15.0	8.0	15.0	14.0	22.5	18.0	---	---	25.5	22.5	23.0	21.5
12	17.0	10.0	14.5	13.5	24.5	19.5	29.0	24.0	24.0	20.0	22.5	20.0
13	14.0	10.5	13.5	12.5	27.5	21.0	25.0	23.0	24.0	20.0	20.5	19.0
14	15.5	9.5	14.0	12.0	26.0	21.0	24.0	21.5	24.5	21.0	21.0	18.0
15	14.5	9.0	15.5	13.0	25.5	20.5	25.0	21.5	24.0	21.0	21.0	19.0
16	15.5	9.5	17.5	15.0	27.0	19.5	25.5	20.5	24.0	20.0	21.0	18.5
17	16.0	12.0	20.0	16.5	27.5	20.5	26.0	21.0	22.5	19.0	19.5	18.0
18	18.5	12.5	22.0	18.5	28.0	20.5	25.5	19.5	24.0	20.0	20.0	17.0
19	18.5	12.5	23.0	20.0	29.0	22.5	25.0	22.0	24.5	20.5	19.0	17.5
20	19.5	12.0	22.5	18.5	29.0	23.5	24.5	19.5	25.0	22.0	18.5	17.0
21	15.0	12.5	---	---	27.5	24.0	24.0	20.0	26.0	23.0	18.0	15.5
22	15.5	11.5	---	---	24.0	21.0	25.5	20.5	26.5	22.0	18.0	15.5
23	16.0	9.5	---	---	26.0	23.5	25.5	22.0	25.0	21.5	19.0	16.0
24	15.0	9.5	---	---	26.5	22.5	24.5	22.0	23.0	18.5	17.5	15.0
25	---	---	---	---	28.0	22.5	25.5	21.0	24.0	20.5	16.5	14.5
26	15.5	12.5	---	---	26.5	23.5	26.0	22.5	25.0	22.0	16.0	14.0
27	12.5	9.0	---	---	28.5	22.5	23.5	20.0	23.0	20.5	18.5	16.0
28	13.0	10.5	---	---	29.5	25.0	23.5	20.0	21.5	19.5	21.5	18.0
29	11.5	9.0	---	---	29.0	25.0	24.0	20.5	22.5	19.0	22.5	20.5
30	15.0	9.0	---	---	28.5	25.0	23.5	20.5	24.0	20.0	23.0	21.0
31	---	---	---	---	---	---	23.5	19.0	24.5	21.5	---	---
MONTH	19.5	4.0	---	---	29.5	17.0	29.0	19.0	27.0	18.5	26.0	14.0
YEAR	29.5	0.0										

04196990 SANDUSKY RIVER AT ST. JOHNS BRIDGE, NEAR MEXICO, OHIO

LOCATION.--Lat 41°01'49", long 83°12'56", in sec. 23, T.1 N., R.14 E., Seneca County, at right upstream abutment of St. Johns Bridge, on Seneca County Highway 6, 100 ft downstream from dam, 2.5 miles upstream from gaging station, 6.5 miles upstream from Honey Creek, and 4.5 miles northwest of Mexico.

DRAINAGE AREA.--771 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1969 to September 1971.
Water temperatures: June 1969 to September 1971.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.								
07...	1125	--	--	--	--	--	--	--
18...	1230	147	247	6	230	27	0.0	1.9
23...	1230	52	200	0	120	27	1.3	13
NOV.								
13...	1130	52	256	11	160	35	.6	4.3
22...	--	60	261	10	220	31	.6	4.4
DEC.								
15...	1300	1030	110	0	110	21	.4	41
JAN.								
08...	1130	540	162	0	130	30	.3	27
30...	1600	90	268	0	210	44	.4	12
FEB.								
02...	2000	74	265	11	230	40	.5	11
21...	2100	6130	66	0	32	13	.3	16
MAR.								
15...	1250	2670	109	0	72	21	.3	42
29...	1000	360	220	0	160	33	.4	12
APR.								
15...	1210	222	238	0	190	27	.5	0.0
21...	1455	129	166	0	180	37	.4	5.6
MAY								
04...	1150	103	224	0	210	29	.5	1.9
07...	1100	3770	120	0	80	22	.2	59
JUNE								
09...	1200	516	144	0	64	18	.3	42
15...	1145	--	--	--	--	--	--	--
20...	1100	61	240	0	150	27	.4	10
JULY								
06...	--	38	224	12	210	35	.6	4.6
23...	1300	36	154	0	130	24	.5	19
AUG.								
11...	1300	24	198	0	150	33	.6	3.7
29...	1700	15	240	0	220	34	.6	2.5
SEP.								
03...	1040	12	248	0	250	34	.7	1.9
24...	1245	32	278	0	340	46	.5	1.7

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	770	760	---	---	---	---	980	960	---	---
2	---	---	---	770	---	---	---	---	990	970	---	---
3	---	---	---	680	---	---	---	---	990	980	---	---
4	---	---	710	670	---	---	---	---	990	960	---	---
5	---	---	1120	630	---	---	---	---	960	210	---	---
6	---	---	1100	630	---	---	---	---	420	320	---	---
7	---	---	1100	790	---	---	---	---	450	320	---	---
8	---	---	910	720	---	---	---	---	350	320	---	---
9	---	---	870	490	---	---	---	---	330	300	---	---
10	---	---	910	540	---	---	---	---	400	330	---	---
11	---	---	760	530	660	630	---	---	480	400	---	---
12	---	---	910	570	760	660	---	---	600	480	---	---
13	---	---	920	820	750	500	---	---	680	560	---	---
14	---	---	930	790	500	430	---	---	650	580	---	---
15	---	---	900	730	560	440	---	---	640	580	450	420
16	---	---	870	700	600	560	---	---	670	620	480	420
17	---	---	840	670	630	560	---	---	780	640	490	480
18	---	---	890	680	610	570	---	---	760	150	---	---
19	---	---	900	650	680	600	810	770	210	130	---	---
20	---	---	880	830	690	680	820	770	270	130	---	---
21	---	---	830	820	700	690	850	820	240	200	---	---
22	---	---	950	900	710	700	870	840	250	210	---	---
23	---	---	900	890	740	710	890	840	---	---	---	---
24	---	---	890	880	740	640	880	860	---	---	---	---
25	---	---	900	870	640	590	880	860	---	---	---	---
26	---	---	970	880	590	580	910	860	---	---	---	---
27	700	690	910	890	---	---	920	890	---	---	---	---
28	720	700	1050	870	---	---	960	920	---	---	---	---
29	730	700	1050	790	---	---	950	920	---	---	---	---
30	750	730	---	---	---	---	950	920	---	---	---	---
31	760	740	---	---	---	---	960	950	---	---	---	---
MONTH	---	---	1120	490	---	---	---	---	990	130	---	---

04198990 SANDUSKY RIVER AT ST. JOHNS BRIDGE, NEAR MEXICO, OHIO--Continued

REMARKS.--Continuous water-quality recorder operated since June 1969. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice a year to further define the quality of water. Records of discharge are given for 04197000 Sandusky River near Mexico (drainage area 774 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
07...	--	--	--	--	--	8.0	1.1
18...	606	450	240	890	8.3	--	--
23...	446	300	140	638	8.2	--	--
NOV.							
13...	576	410	180	866	8.5	--	--
22...	620	450	220	923	8.4	--	--
DEC.							
15...	356	230	130	589	7.7	--	--
JAN.							
08...	378	280	150	615	8.2	--	--
30...	636	460	220	946	8.2	--	--
FEB.							
02...	668	490	240	989	8.4	--	--
21...	140	93	40	240	7.6	--	--
MAR.							
15...	314	200	110	451	7.5	--	--
29...	510	360	180	740	8.2	--	--
APR.							
15...	514	370	170	759	7.5	--	--
21...	482	340	190	722	7.2	--	--
MAY							
04...	514	400	220	799	8.2	--	--
07...	332	240	140	512	7.9	--	--
JUNE							
09...	308	220	100	481	8.2	--	--
15...	--	--	--	--	--	13	1.0
20...	498	380	180	758	7.4	--	--
JULY							
06...	554	430	230	851	8.5	--	--
23...	380	280	150	598	7.6	--	--
AUG.							
11...	406	320	160	691	8.2	--	--
29...	540	420	220	859	7.3	--	--
SEP.							
03...	592	460	260	920	8.0	--	--
24...	782	570	340	1140	7.7	--	--

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	770	740	690	670	---	---	740	630	900	850
2	---	---	770	760	700	690	---	---	670	620	920	900
3	---	---	800	750	710	690	---	---	670	610	920	850
4	---	---	800	750	720	710	---	---	700	650	930	860
5	---	---	810	800	720	670	---	---	700	660	940	910
6	---	---	820	450	700	660	850	740	730	690	960	930
7	---	---	520	480	710	570	750	660	730	700	970	950
8	---	---	540	490	650	320	730	670	710	650	960	940
9	---	---	570	530	510	440	750	710	660	630	950	920
10	---	---	560	550	530	500	790	750	660	650	980	940
11	---	---	600	550	570	530	810	770	700	650	990	950
12	---	---	610	580	640	510	850	810	680	650	1000	960
13	---	---	630	520	640	520	870	820	710	670	1000	990
14	---	---	550	510	570	500	830	550	780	710	1010	990
15	740	690	580	510	660	570	550	460	750	740	1040	1010
16	760	700	630	580	700	660	690	490	760	740	1050	1020
17	750	710	660	590	770	680	720	680	760	720	1030	1010
18	720	650	690	580	720	640	720	660	760	690	1030	980
19	650	620	710	690	720	670	670	610	700	680	1040	1000
20	620	610	700	680	730	680	620	600	720	680	1080	1040
21	700	690	710	700	740	700	630	560	770	720	1100	1080
22	690	680	760	710	750	710	600	550	780	750	1120	1090
23	700	680	770	750	770	730	600	550	800	760	1130	1100
24	700	690	780	770	770	730	610	560	800	770	1140	1070
25	720	700	790	270	830	730	620	570	800	760	1070	1020
26	720	700	460	350	800	770	650	560	820	780	1040	1030
27	720	710	500	430	---	---	660	620	850	810	1030	980
28	730	710	590	500	---	---	710	650	880	850	980	960
29	750	730	630	590	---	---	750	700	870	850	960	920
30	750	740	650	620	---	---	760	740	870	840	940	910
31	---	---	670	640	---	---	760	740	870	840	---	---
MONTH	---	---	820	270	830	320	870	460	880	610	1140	850

04196990 SANDUSKY RIVER AT ST. JOHNS BRIDGE, NEAR MEXICO, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	4.8	4.3	---	---	---	---	15.0	14.9	---	---
2	---	---	4.8	4.4	---	---	---	---	14.9	14.5	---	---
3	---	---	4.8	4.5	---	---	---	---	14.5	14.3	---	---
4	---	---	4.6	4.3	---	---	---	---	14.3	13.7	---	---
5	---	---	4.5	4.3	---	---	---	---	14.5	13.6	---	---
6	---	---	4.7	4.5	---	---	---	---	14.1	13.7	---	---
7	---	---	5.2	4.6	---	---	---	---	13.8	12.5	---	---
8	---	---	5.5	4.1	---	---	---	---	12.5	11.5	---	---
9	---	---	5.6	5.4	---	---	---	---	14.4	10.6	---	---
10	---	---	5.5	5.2	---	---	---	---	14.2	13.4	---	---
11	---	---	5.4	5.2	13.9	11.3	---	---	13.5	13.2	---	---
12	---	---	5.5	5.2	11.3	9.6	---	---	13.3	13.2	---	---
13	---	---	5.5	5.1	9.6	8.9	---	---	13.7	13.3	---	---
14	---	---	5.6	5.3	9.0	8.8	---	---	13.8	13.5	---	---
15	---	---	5.9	5.6	9.0	8.9	---	---	13.5	13.3	11.2	6.3
16	---	---	6.0	5.8	9.0	8.8	---	---	13.3	13.2	6.4	5.7
17	---	---	6.1	5.9	8.8	8.7	---	---	13.2	13.0	5.9	5.8
18	---	---	6.0	5.8	8.7	8.5	---	---	13.6	13.1	---	---
19	---	---	6.3	6.0	8.5	8.3	13.1	11.9	13.5	13.0	---	---
20	---	---	6.5	6.2	8.3	8.1	14.7	12.9	13.0	12.9	---	---
21	---	---	6.8	6.5	8.1	8.1	15.0	14.7	12.9	12.7	---	---
22	---	---	7.0	6.7	11.7	8.1	15.0	14.8	12.8	12.5	---	---
23	---	---	7.5	7.0	13.1	9.8	15.0	15.0	---	---	---	---
24	---	---	7.5	7.1	11.9	10.3	15.0	15.0	---	---	---	---
25	---	---	7.2	6.7	12.3	10.1	15.0	15.0	---	---	---	---
26	---	---	6.7	6.6	---	---	15.0	14.8	---	---	---	---
27	10.5	7.9	6.8	6.6	---	---	15.0	14.8	---	---	---	---
28	7.9	6.4	6.9	6.7	---	---	15.0	15.0	---	---	---	---
29	6.4	5.4	6.8	6.4	---	---	15.0	14.6	---	---	---	---
30	6.1	5.3	6.6	6.4	---	---	14.9	14.4	---	---	---	---
31	5.8	4.8	---	---	---	---	15.0	14.9	---	---	---	---
MONTH	---	---	7.5	4.1	---	---	---	---	15.0	10.6	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	8.0	7.5	---	---	---	---	6.6	6.4
2	---	---	---	---	7.8	7.3	---	---	---	---	6.7	6.6
3	---	---	---	---	7.6	7.1	---	---	---	---	6.6	6.4
4	---	---	11.2	10.2	7.4	6.9	---	---	---	---	6.5	6.4
5	---	---	10.3	9.9	7.1	6.7	---	---	---	---	6.6	6.5
6	---	---	10.6	9.8	7.0	6.5	8.7	6.0	---	---	6.7	6.3
7	---	---	10.5	10.3	6.7	6.4	7.2	4.0	---	---	6.4	6.3
8	---	---	10.5	10.1	7.2	6.3	4.4	4.1	---	---	6.6	6.4
9	---	---	10.1	9.6	7.4	6.9	4.6	4.3	---	---	6.7	6.4
10	---	---	9.9	8.8	7.9	7.3	4.8	4.5	---	---	6.8	6.6
11	---	---	9.4	8.4	8.1	7.5	5.5	4.8	6.9	6.1	7.0	6.8
12	---	---	9.4	8.4	8.1	7.1	6.2	5.5	6.2	6.1	7.1	6.9
13	---	---	8.6	8.4	7.7	7.1	6.3	5.9	6.2	5.8	7.3	7.1
14	---	---	8.6	8.3	7.3	6.7	6.5	6.2	6.4	6.0	7.5	7.1
15	15.0	10.1	8.4	7.5	7.0	6.7	6.7	6.3	6.3	6.1	7.5	7.1
16	---	---	8.0	7.8	---	---	6.5	6.3	6.3	6.0	7.5	7.2
17	---	---	7.8	7.1	---	---	7.1	6.4	6.7	6.0	7.5	7.3
18	---	---	7.6	6.7	---	---	7.2	5.9	6.7	6.0	7.7	7.3
19	---	---	6.7	6.6	---	---	7.1	6.5	6.2	6.1	7.7	7.4
20	---	---	7.2	6.6	---	---	6.6	5.9	6.2	6.1	7.8	7.6
21	---	---	7.5	7.0	---	---	6.5	6.1	6.1	6.1	7.9	7.6
22	---	---	7.8	7.5	---	---	6.4	6.1	6.1	6.0	8.0	7.6
23	---	---	7.9	7.6	---	---	6.3	6.3	6.1	6.0	8.1	7.8
24	---	---	7.9	7.6	---	---	6.4	6.3	6.2	6.1	8.1	7.9
25	---	---	8.6	7.8	---	---	6.6	6.3	6.2	6.1	8.2	7.8
26	---	---	9.2	8.6	---	---	6.8	6.3	6.2	6.1	8.2	8.0
27	---	---	9.2	8.9	---	---	6.8	6.5	6.3	6.1	8.0	7.9
28	---	---	9.4	8.6	---	---	7.0	6.7	6.4	6.3	8.0	7.8
29	---	---	9.2	8.4	---	---	7.1	6.9	6.4	6.3	8.2	7.8
30	---	---	8.7	8.1	---	---	7.2	6.3	6.4	6.4	8.1	8.0
31	---	---	8.4	7.8	---	---	---	---	6.5	6.3	---	---
MONTH	---	---	11.2	6.6	---	---	8.7	4.0	---	---	8.2	6.3

04196990 SANDUSKY RIVER AT ST. JOHNS BRIDGE, NEAR MEXICO, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	15.5	13.5	13.5	---	---	---	---	0.5	0.0	---	---
2	15.5	15.0	13.5	13.0	---	---	---	---	0.5	0.0	---	---
3	16.0	15.5	13.0	12.0	---	---	---	---	0.5	0.0	---	---
4	16.0	15.0	12.0	11.5	---	---	---	---	0.5	0.0	---	---
5	18.5	15.0	11.5	11.0	---	---	---	---	0.5	0.0	---	---
6	18.5	15.0	11.0	10.5	---	---	---	---	0.0	0.0	---	---
7	16.5	15.5	10.5	10.0	---	---	---	---	0.0	0.0	---	---
8	18.0	15.5	10.5	9.5	---	---	---	---	0.0	0.0	---	---
9	18.5	16.5	10.5	9.5	---	---	---	---	0.0	0.0	---	---
10	18.0	15.5	10.5	10.0	---	---	---	---	0.0	0.0	---	---
11	16.0	15.0	11.0	10.5	2.5	2.0	---	---	0.0	0.0	---	---
12	16.0	15.5	10.5	10.5	3.0	2.5	---	---	0.0	0.0	---	---
13	16.0	15.5	10.5	9.5	3.5	3.0	---	---	0.0	0.0	---	---
14	16.0	15.5	9.5	8.5	3.5	3.0	---	---	0.0	0.0	---	---
15	16.0	15.0	8.5	7.0	3.0	1.5	---	---	0.0	0.0	7.0	6.0
16	15.0	14.5	7.0	6.5	1.5	1.0	---	---	0.0	0.0	6.0	5.0
17	14.5	13.5	6.5	6.0	1.5	1.5	---	---	0.0	0.0	5.5	5.0
18	13.5	12.0	6.5	5.5	2.0	1.5	---	---	0.0	0.0	---	---
19	13.0	11.5	5.5	5.0	2.5	1.5	0.5	0.0	0.0	0.0	---	---
20	11.5	11.5	5.5	5.0	3.0	2.5	0.5	0.0	0.0	0.0	---	---
21	12.0	11.5	5.0	4.5	2.5	2.0	0.5	0.0	0.0	0.0	---	---
22	12.0	11.5	5.0	4.5	2.0	1.5	0.5	0.0	0.0	0.0	---	---
23	13.0	11.0	4.5	2.0	2.0	1.5	0.5	0.0	---	---	---	---
24	13.0	11.5	2.0	1.5	1.5	1.0	0.5	0.0	---	---	---	---
25	13.5	12.0	2.0	1.5	1.0	0.0	0.5	0.0	---	---	---	---
26	14.0	12.0	2.0	2.0	0.0	0.0	0.5	0.0	---	---	---	---
27	14.5	13.0	2.0	2.0	---	---	0.5	0.0	---	---	---	---
28	13.5	13.0	2.0	2.0	---	---	0.5	0.0	---	---	---	---
29	13.0	13.0	3.5	2.0	---	---	0.5	0.0	---	---	---	---
30	14.0	13.0	3.5	3.0	---	---	0.5	0.0	---	---	---	---
31	14.0	13.0	---	---	---	---	0.5	0.0	---	---	---	---
MONTH	18.5	11.0	13.5	1.5	---	---	---	---	0.5	0.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	12.0	11.5	19.0	18.5	---	---	24.0	22.0	24.0	23.0
2	---	---	12.0	11.0	20.0	19.0	---	---	24.0	22.5	23.5	22.5
3	---	---	11.5	11.0	21.0	19.5	---	---	24.5	23.0	24.0	22.0
4	---	---	13.0	11.5	22.5	20.0	---	---	24.0	23.0	24.0	23.0
5	---	---	14.0	13.0	24.0	22.0	---	---	25.0	22.5	25.5	24.0
6	---	---	14.0	13.0	24.5	23.0	25.5	25.5	24.5	22.0	25.5	25.0
7	---	---	13.0	13.0	24.5	24.0	26.5	25.0	23.0	22.0	26.5	24.5
8	---	---	13.5	13.0	24.5	21.5	26.5	25.5	24.0	22.5	26.0	24.5
9	---	---	---	---	21.5	20.5	27.0	26.0	24.5	23.0	26.5	24.5
10	---	---	---	---	21.0	19.5	26.5	26.0	25.5	24.0	26.0	24.0
11	---	---	---	---	20.5	19.5	26.5	26.0	24.5	24.0	24.5	23.5
12	---	---	15.0	14.5	20.5	20.0	26.0	24.5	25.5	23.0	24.0	23.5
13	---	---	14.5	13.0	22.0	21.0	25.0	24.0	24.5	23.5	23.5	22.0
14	---	---	13.5	12.5	22.5	22.0	25.0	24.0	24.0	23.0	22.0	21.5
15	12.5	12.0	15.5	13.0	23.0	22.5	24.5	23.0	24.0	23.5	21.5	21.0
16	13.5	12.0	16.0	15.0	---	---	24.0	23.0	25.0	23.0	23.0	21.0
17	15.0	13.5	17.5	16.0	---	---	24.0	23.5	24.0	22.0	22.0	21.0
18	16.5	15.0	19.0	17.0	---	---	25.0	23.5	23.5	21.5	22.0	20.5
19	17.0	15.5	20.5	19.0	---	---	24.0	22.5	23.5	22.0	21.5	20.5
20	16.0	15.0	21.0	20.0	---	---	23.0	22.5	24.0	23.0	20.5	19.5
21	15.0	14.0	21.0	19.5	---	---	23.5	21.5	24.0	23.5	20.0	19.0
22	14.0	13.5	20.0	18.5	---	---	23.5	22.5	24.5	23.5	20.5	18.5
23	14.0	13.0	19.0	18.5	---	---	24.0	23.0	25.0	23.5	19.0	18.5
24	14.5	12.5	18.5	18.0	---	---	24.5	23.5	24.5	23.5	19.0	18.0
25	13.0	12.0	18.5	15.5	---	---	24.5	23.0	24.5	23.0	18.5	18.0
26	14.0	13.0	15.5	14.0	---	---	24.5	22.5	24.5	23.5	18.0	17.0
27	13.5	12.0	14.0	13.5	---	---	23.0	22.5	23.5	23.0	19.0	17.5
28	12.5	12.0	14.5	13.5	---	---	23.0	21.5	23.0	22.5	19.0	18.0
29	12.0	11.5	15.5	14.0	---	---	22.5	21.5	23.5	22.0	19.5	18.0
30	12.0	11.5	17.0	15.5	---	---	23.0	22.0	23.5	22.0	20.0	19.0
31	---	---	18.5	17.0	---	---	23.0	21.5	25.0	23.0	---	---
MONTH	---	---	21.0	11.0	---	---	27.0	21.5	25.5	21.5	26.5	17.0

04198005 SANDUSKY RIVER BELOW FREMONT, OHIO

LOCATION.--Lat 41°22'12", long 83°06'10", Sandusky County, on left bank 0.3 mile downstream from U.S. Highway 20 bridge, 0.7 mile downstream from Fremont Sewage plant, 7 miles downstream from gaging station near Fremont, and 4 miles upstream from Muskellunge Creek.

DRAINAGE AREA.--1,264 sq mi.

PERIOD OF RECORD.--Chemical analyses: September 1966 to September 1971.
Water temperatures: September 1966 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,010 micromhos Oct. 11; minimum, 246 micromhos Feb. 21.
pH: Maximum, 9.7 May 26; minimum, 6.0 July 12.
Dissolved oxygen: Maximum, 15.0 mg/l Nov. 9, Mar. 22-27, 29, 30, Apr. 8, 9, 11, 12; minimum, 0.0 mg/l Oct. 14.
Water temperatures: Maximum, 29.5°C June 30; minimum, freezing point on many days during November to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.								
06...	1600	--	--	--	--	--	--	--
12...	1700	51	276	0	220	50	.7	4.5
23...	1000	86	215	11	180	38	.6	5.0
NOV.								
09...	1700	109	253	0	150	43	.6	6.4
26...	0800	100	292	22	180	49	.6	5.4
DEC.								
16...	2200	954	127	0	93	25	.3	41
JAN.								
11...	2000	400	196	0	130	36	.4	28
29...	1600	160	261	0	200	59	.5	15
FEB.								
03...	1600	120	270	17	200	60	.5	12
19...	1600	7000	81	0	42	19	.3	14
MAR.								
01...	1600	2760	110	0	67	18	.3	31
29...	1800	600	163	6	130	28	.3	30
APR.								
01...	1800	434	218	0	140	38	.3	24
26...	1800	182	215	6	180	46	.5	4.9
MAY								
03...	2100	210	224	0	170	49	.4	4.8
26...	1600	5950	121		49	16	.3	44
JUNE								
03...	1300	--	--	--	--	--	--	--
04...	1900	392	206	0	110	25	.3	36
07...	1630	1550	150	0	70	18	.3	32
JULY								
14...	1900	302	104	0	120	36	.5	8.8
19...	1900	69	230	0	200	44	.6	3.0
28...	1250	--	--	--	--	--	--	--
AUG.								
04...	1635	57	176	0	160	34	.6	4.7
28...	1700	39	220	0	170	62	.7	5.8
SEP.								
25...	1700	53	252	0	160	85	.7	8.1
30...	1215	47	210	0	160	66	.6	7.0

04198005 SANDUSKY RIVER BELOW FREMONT, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1967-71): Maximum, 1,100 micromhos Jan. 25, 26, 1970; minimum, 220 micromhos Jan. 30, 31, 1968.
pH (1969-71): Maximum, 9.7 May 26, 1971; minimum, 4.8 Apr. 26, 1970.
Dissolved oxygen (1970-71): Maximum, 15.0 mg/l Nov. 9, 1970, Mar. 22-27, 29, 30, Apr. 8, 9, 11, 12, 1971; minimum, 0.0 mg/l Oct. 14, 1970.
Water temperatures: Maximum, 32.5°C Aug. 17, 1970; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since September 1966. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected three times during the year to further define the quality of water. Records of discharge are given for 04198000 Sandusky River near Fremont, Ohio (drainage area 1,251 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC CONDUCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
06...	--	--	--	--	--	6.0	1.3
12...	2.3	632	440	220	984	--	--
23...	1.5	472	340	140	742	--	--
NOV.							
09...	1.9	498	360	150	786	--	--
26...	1.5	604	440	160	954	--	--
DEC.							
16...	.72	276	220	120	505	--	--
JAN.							
11...	.88	446	300	140	690	--	--
29...	1.2	622	430	200	943	--	--
FEB.							
03...	1.3	650	460	210	1000	--	--
19...	1.0	202	120	54	302	--	--
MAR.							
01...	.45	262	190	90	407	--	--
29...	.95	420	310	150	656	--	--
APR.							
01...	.57	456	340	180	698	--	--
28...	1.3	512	350	180	761	--	--
MAY							
03...	1.5	524	370	190	808	--	--
26...	6.4	242	190	91	400	--	--
JUNE							
03...	--	--	--	--	--	149	6.6
04...	1.1	438	320	150	662	--	--
07...	1.7	316	230	110	478	--	--
JULY							
14...	1.0	402	290	140	645	--	--
19...	1.8	530	390	200	836	--	--
28...	--	--	--	--	--	--	1.9
AUG.							
04...	.76	436	320	180	675	--	--
28...	3.6	524	340	160	844	--	--
SEP.							
25...	3.7	570	350	140	923	--	--
30...	1.9	510	330	160	806	--	--

04198005 SANDUSKY RIVER BELOW FREMONT, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	924	902	---	---	918	867	716	686	998	968	402	374
2	978	918	---	---	867	772	718	682	967	925	435	303
3	977	950	---	---	840	802	722	701	950	892	461	435
4	997	961	862	840	864	795	776	706	946	907	495	461
5	995	949	849	821	862	829	812	776	991	626	512	491
6	977	932	883	829	892	328	817	794	626	388	516	491
7	982	953	855	819	820	752	850	800	418	397	569	516
8	984	948	843	773	752	692	802	527	459	387	588	345
9	992	962	817	785	696	653	728	697	449	432	555	549
10	1000	961	834	796	684	665	718	682	432	411	588	550
11	1010	978	836	824	712	674	689	668	413	408	582	572
12	987	964	824	758	736	710	679	668	455	411	590	566
13	967	954	852	793	742	604	689	677	447	434	602	578
14	956	924	865	850	680	587	728	682	546	447	582	485
15	951	906	893	863	583	521	725	701	545	510	500	470
16	955	920	907	878	538	518	743	710	534	507	502	472
17	949	878	884	859	587	538	754	715	586	501	510	488
18	882	820	887	860	626	587	785	754	594	392	515	497
19	861	813	904	887	634	610	814	782	392	252	549	493
20	857	811	943	721	655	631	823	789	260	249	564	546
21	813	799	928	526	665	642	837	823	257	246	590	564
22	821	775	947	919	686	665	832	804	281	255	598	581
23	815	767	923	914	721	675	876	828	285	270	619	590
24	820	787	929	859	740	688	899	870	276	263	605	580
25	845	797	962	929	---	---	906	869	273	261	627	597
26	873	824	951	923	---	---	939	878	306	272	627	603
27	887	852	923	884	---	---	943	892	389	306	643	613
28	894	878	932	893	677	665	962	923	399	380	648	621
29	933	891	905	861	686	661	965	913	---	---	666	636
30	948	933	927	900	697	649	966	913	---	---	682	654
31	---	---	---	---	691	649	990	963	---	---	686	663
MONTH	1010	747	962	526	918	328	990	527	998	246	686	303

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	710	677	827	774	648	612	634	622	729	701	855	840
2	741	710	815	780	653	623	639	610	715	703	879	846
3	756	719	828	773	647	641	651	627	717	696	896	879
4	733	715	819	761	659	644	649	628	715	700	900	885
5	733	721	779	755	677	648	661	636	739	702	899	866
6	734	719	788	759	672	654	685	658	746	709	902	891
7	745	727	765	510	671	501	682	654	730	712	903	872
8	760	739	524	485	648	521	672	657	728	707	896	891
9	776	752	528	492	710	636	682	648	728	712	896	867
10	779	749	563	528	680	542	696	654	729	714	906	867
11	786	736	575	562	539	519	714	672	749	725	902	885
12	751	714	590	567	582	530	726	702	759	731	926	900
13	732	717	617	590	602	452	714	687	762	738	944	926
14	745	698	644	616	522	464	738	663	756	741	960	917
15	744	686	645	585	566	522	771	691	754	739	926	885
16	732	678	594	584	557	540	812	771	765	735	927	896
17	723	687	590	575	602	554	824	794	784	744	920	893
18	740	690	609	590	606	567	842	815	785	745	929	894
19	744	687	639	608	633	606	851	818	812	804	924	899
20	755	689	677	639	626	608	876	817	843	812	947	912
21	749	698	693	623	637	614	835	798	839	806	953	918
22	768	728	729	648	662	622	850	803	843	815	966	915
23	785	735	689	656	670	634	823	806	843	818	948	906
24	828	747	678	633	661	628	808	793	860	818	962	915
25	813	759	720	480	645	604	805	760	830	813	981	942
26	809	756	512	455	627	609	774	745	840	822	966	942
27	809	785	510	473	630	615	791	746	861	840	956	879
28	807	786	549	504	628	600	846	695	870	840	894	779
29	791	755	579	537	627	604	740	709	872	834	843	822
30	801	759	608	566	633	615	702	690	866	828	849	781
31	---	---	624	591	---	---	743	699	861	818	---	---
MONTH	828	677	828	455	710	452	876	610	872	696	981	779
YEAR	1010	246										

04198005 SANDUSKY RIVER BELOW FREMONT, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.1	7.4	---	---	8.5	8.2	8.1	7.9	8.1	8.0	7.8	7.6
2	8.1	7.8	---	---	8.5	8.2	8.1	8.0	8.1	8.0	7.8	7.4
3	8.0	7.9	---	---	8.2	8.1	8.0	7.9	8.0	7.6	7.9	7.8
4	8.0	7.9	8.0	7.8	8.4	7.9	8.1	7.9	8.0	7.9	7.9	7.9
5	8.1	7.9	8.8	7.1	8.1	8.0	8.2	8.0	8.6	8.0	8.1	7.9
6	8.2	8.0	8.8	8.0	9.0	8.1	8.2	8.1	8.3	7.8	7.9	7.8
7	8.3	8.1	8.2	7.6	9.4	9.0	8.2	8.1	7.9	7.5	8.0	7.8
8	8.3	8.1	9.0	7.8	9.1	8.4	8.4	7.9	7.7	7.2	7.9	7.8
9	8.9	7.8	9.0	8.6	8.4	8.2	7.9	7.9	7.8	7.7	7.8	7.7
10	7.9	7.6	8.9	8.5	8.3	8.2	8.1	7.9	7.7	7.6	7.8	7.6
11	7.7	7.6	8.5	8.3	8.2	8.0	8.1	8.0	7.7	7.6	7.9	7.8
12	7.6	7.5	8.6	8.1	8.4	8.1	8.1	8.0	7.6	7.5	8.0	7.9
13	7.5	7.4	8.3	8.1	9.1	8.4	8.1	7.9	7.7	7.5	8.0	7.9
14	7.5	7.1	8.1	8.1	9.0	8.2	8.0	8.0	7.8	7.7	7.9	7.7
15	7.3	7.1	8.1	8.0	8.3	8.0	8.1	8.0	7.8	7.7	7.8	7.7
16	7.1	6.7	8.1	8.0	8.2	7.9	8.1	8.0	7.8	7.7	7.8	7.7
17	7.6	7.1	8.2	8.1	8.1	7.9	8.2	8.0	7.8	7.7	7.8	7.7
18	7.8	7.5	8.2	8.1	8.1	8.0	8.3	8.1	7.8	7.6	7.9	7.8
19	8.4	7.6	8.2	8.1	8.1	7.9	8.3	8.1	7.8	7.5	7.9	7.8
20	8.0	7.4	8.6	8.1	8.3	8.0	8.2	8.1	8.5	7.7	8.0	7.9
21	8.2	7.7	8.7	8.2	8.2	8.1	8.2	8.1	7.7	7.5	8.0	7.9
22	8.0	7.5	8.5	8.1	8.1	8.0	8.1	8.0	7.7	7.5	7.9	7.8
23	8.6	7.7	8.5	7.9	8.0	8.0	8.2	8.0	7.8	7.6	7.9	7.9
24	8.3	7.8	7.9	7.7	8.3	8.0	8.2	8.0	7.7	7.6	8.0	7.9
25	8.7	8.2	8.1	7.9	---	---	8.1	8.0	7.6	7.4	8.0	7.9
26	8.5	8.4	7.9	7.6	---	---	8.1	8.0	7.5	7.4	8.0	7.9
27	8.8	7.9	7.8	7.5	---	---	8.1	8.0	8.0	7.5	8.0	7.9
28	8.4	---	8.0	7.8	7.8	7.6	8.1	8.0	7.9	7.8	8.0	7.9
29	8.3	---	8.2	7.8	8.0	7.8	8.1	8.0	---	---	8.0	7.9
30	7.8	---	8.3	8.2	8.0	7.9	8.1	8.0	---	---	8.0	8.0
31	---	---	---	---	8.0	7.9	8.1	8.1	---	---	8.1	8.0
MONTH	8.9	6.7	9.3	7.1	9.4	7.6	8.4	7.9	8.6	7.2	8.1	7.4

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.1	8.0	8.8	8.4	8.1	7.8	---	---	8.8	8.3	8.6	8.3
2	8.2	8.0	8.7	8.5	8.1	8.0	---	---	8.6	7.6	8.7	8.3
3	8.2	8.1	8.7	8.6	8.0	7.8	---	---	8.6	7.7	8.3	7.8
4	8.3	8.1	8.9	8.7	7.9	7.7	---	---	8.5	8.2	7.9	7.8
5	8.4	8.1	---	---	8.0	7.6	---	---	8.8	7.9	8.0	7.4
6	8.3	8.2	---	---	8.1	7.7	8.3	7.3	8.9	7.9	7.9	7.4
7	8.4	8.1	---	---	7.8	7.4	7.6	7.0	8.8	8.2	7.8	7.6
8	8.4	8.3	---	---	7.6	7.4	8.2	6.9	9.1	8.5	8.0	7.6
9	8.3	8.2	8.7	8.4	7.7	7.5	8.4	7.5	8.8	8.3	8.5	8.0
10	8.5	8.3	8.5	8.1	7.6	7.4	8.2	7.3	8.5	7.6	8.5	7.8
11	8.6	8.4	8.4	8.0	7.7	7.0	8.0	7.2	8.5	7.5	8.2	7.7
12	8.6	8.4	9.1	8.4	7.9	7.5	7.7	6.0	8.3	7.8	7.8	7.6
13	8.5	8.4	8.6	8.3	8.1	7.6	8.1	6.8	8.2	7.2	7.7	7.5
14	8.5	8.3	9.1	8.6	8.0	7.5	8.7	6.4	8.1	7.8	8.1	7.6
15	8.6	8.5	---	8.5	8.5	7.5	8.8	8.4	8.3	7.8	7.9	7.5
16	8.6	8.4	---	---	8.5	7.4	9.2	8.5	8.6	7.8	7.7	7.5
17	8.6	8.4	---	---	7.7	7.3	9.1	8.4	8.4	7.9	7.8	7.5
18	8.7	8.4	8.0	7.9	8.1	6.7	8.9	8.3	8.4	7.8	7.9	7.5
19	8.7	8.4	8.5	7.9	7.5	6.7	8.8	8.3	7.9	7.8	7.8	7.6
20	8.5	8.3	8.2	7.9	7.6	6.9	8.5	8.3	8.2	7.8	7.6	7.5
21	8.5	8.3	8.5	7.6	7.3	6.8	8.8	8.3	8.4	8.2	8.1	7.5
22	8.3	8.2	8.1	7.5	7.4	6.8	8.9	8.3	8.2	8.0	8.4	7.9
23	8.5	8.1	8.7	8.1	7.3	6.9	8.6	8.0	8.1	7.8	8.5	7.9
24	8.4	8.1	8.8	8.5	7.5	6.7	8.4	8.1	8.0	7.8	8.4	7.9
25	8.2	8.1	9.4	8.4	8.4	6.9	8.3	7.4	8.0	7.9	8.2	7.9
26	8.3	8.1	9.7	8.5	8.4	8.0	7.8	7.5	8.1	7.9	8.2	7.9
27	8.3	8.3	8.7	8.4	8.4	7.8	8.0	7.6	7.9	7.8	8.3	7.9
28	8.8	8.2	8.5	7.7	8.7	7.7	8.4	7.9	8.3	7.7	8.1	7.7
29	8.5	8.4	8.1	7.9	---	---	8.4	7.9	8.2	7.9	8.1	7.7
30	8.4	8.3	8.0	7.9	---	---	8.6	8.3	8.3	7.9	8.0	7.3
31	---	---	7.9	7.7	---	---	8.5	8.0	8.8	7.9	---	---
MONTH	8.8	8.0	---	7.5	8.7	6.7	9.2	6.0	9.1	7.2	8.7	7.3
YEAR	9.7	6.0										

04198005 SANDUSKY RIVER BELOW FREMONT, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	2.4	---	---	12.6	11.9	13.9	12.9	13.7	12.4	12.5	11.7
2	8.3	3.8	---	---	11.9	10.8	13.5	13.0	12.8	12.1	11.8	---
3	8.4	4.8	---	---	10.9	10.3	13.5	12.6	13.8	12.6	---	---
4	7.9	5.4	4.6	1.6	11.2	10.0	13.7	12.7	13.6	12.7	---	---
5	8.6	4.6	1.6	0.2	12.1	11.0	13.7	12.5	13.4	11.6	---	---
6	7.8	0.9	6.9	0.3	12.9	11.5	14.1	13.7	13.3	12.9	---	---
7	1.8	0.9	2.5	0.2	13.1	12.1	14.4	14.1	13.0	12.6	---	---
8	1.6	0.9	13.4	1.7	13.1	12.8	14.3	13.2	13.1	12.4	---	---
9	1.0	0.4	15.0	11.0	13.3	12.4	14.0	13.5	13.0	12.7	---	---
10	1.6	0.3	13.5	8.8	13.0	12.1	13.8	13.3	12.9	12.2	---	---
11	0.5	0.3	11.1	8.2	12.1	11.0	13.7	13.3	13.0	12.7	---	---
12	2.4	0.3	12.4	8.1	11.7	10.9	14.0	13.5	12.8	11.7	---	---
13	1.7	0.4	8.8	6.9	12.8	11.7	14.2	13.0	12.1	11.8	---	---
14	0.4	0.0	8.7	8.1	13.7	12.8	14.0	13.4	12.2	11.4	---	---
15	---	---	8.9	7.4	13.8	13.7	13.7	13.1	12.5	12.1	---	---
16	---	---	10.1	8.2	13.8	12.7	14.0	13.4	12.6	12.3	---	---
17	---	---	10.6	9.1	12.9	12.7	14.3	13.7	12.6	12.2	---	---
18	---	---	10.9	8.9	12.8	12.4	14.2	13.2	12.8	12.5	10.9	10.4
19	---	---	11.8	10.1	12.7	11.8	13.8	13.3	13.5	12.6	10.7	9.9
20	---	---	11.8	9.9	12.0	11.7	13.9	13.4	13.8	12.9	10.6	10.2
21	---	---	11.1	8.9	11.9	11.3	14.4	13.7	13.8	13.6	11.0	10.5
22	---	---	11.0	8.3	11.7	11.1	14.1	13.5	13.7	13.4	15.0	9.9
23	---	---	11.2	10.6	11.1	10.4	13.5	13.1	13.8	13.1	15.0	10.1
24	---	---	11.7	11.0	11.3	9.2	13.3	12.4	13.3	13.2	15.0	10.3
25	---	---	11.5	11.1	---	---	13.3	12.6	13.3	12.8	15.0	10.4
26	---	---	12.2	11.0	---	---	13.1	12.6	13.6	12.6	15.0	10.5
27	---	---	12.7	12.0	---	---	13.6	12.7	13.1	12.6	15.0	10.1
28	---	---	12.1	10.4	14.1	13.2	13.1	12.5	12.7	12.4	11.2	10.2
29	---	---	11.2	10.5	14.3	13.2	14.6	13.1	---	---	15.0	9.7
30	---	---	12.1	10.9	14.5	13.7	14.0	13.5	---	---	15.0	9.7
31	---	---	---	---	14.1	13.3	14.0	13.6	---	---	10.7	9.6
MONTH	---	---	15.0	0.2	14.5	9.2	14.6	12.4	13.8	11.4	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.3	9.1	9.6	8.6	5.7	5.0	2.8	1.9	4.0	2.5	5.9	4.0
2	14.2	9.5	8.8	7.8	5.7	4.3	6.6	2.5	3.8	2.4	5.2	2.8
3	10.4	10.2	8.4	6.8	5.7	4.2	6.2	4.6	6.4	2.7	2.8	1.4
4	11.1	10.3	8.8	7.5	6.0	4.6	6.7	5.7	5.8	3.8	2.5	1.3
5	11.9	10.5	9.6	7.8	5.6	3.7	6.4	---	6.9	3.0	4.6	1.3
6	11.1	10.7	10.2	6.8	6.5	3.7	3.5	1.8	6.7	3.1	3.7	2.1
7	11.4	10.5	8.6	6.8	6.5	4.5	5.6	3.0	6.1	2.9	3.1	1.6
8	15.0	10.6	8.5	8.1	7.1	6.3	11.9	3.9	6.3	4.1	3.2	1.6
9	15.0	9.7	8.3	8.1	8.5	6.7	10.8	4.5	5.4	3.3	4.7	3.2
10	14.7	9.6	8.1	7.8	8.1	6.8	9.2	2.2	5.4	3.1	3.6	2.3
11	15.0	10.0	7.9	7.2	7.6	6.7	9.0	3.2	6.0	2.4	4.8	2.1
12	15.0	10.2	7.3	7.0	7.2	6.5	7.2	2.7	5.2	2.5	3.9	1.8
13	10.7	9.3	8.0	6.8	7.8	7.0	13.0	4.1	5.0	2.7	2.5	1.2
14	9.6	7.7	8.2	7.6	7.3	5.8	4.5	1.7	4.5	2.7	2.1	1.2
15	12.5	9.5	7.7	7.3	6.6	5.2	8.1	2.3	4.5	2.5	3.9	2.1
16	11.5	8.8	7.3	6.5	6.7	5.0	10.4	5.7	7.1	2.5	2.8	2.1
17	10.3	7.4	6.5	5.4	8.2	5.1	9.0	4.3	6.4	3.2	2.5	2.1
18	9.4	7.7	7.1	5.6	8.5	5.8	9.5	6.6	6.0	2.7	2.8	2.0
19	9.4	7.8	7.1	5.8	8.1	5.3	9.5	4.8	4.7	3.8	2.4	2.1
20	10.8	8.2	6.0	4.7	7.8	4.9	5.1	2.7	4.2	2.1	2.2	1.8
21	10.9	8.1	5.9	4.7	8.4	4.1	6.5	3.0	3.7	2.4	3.2	1.6
22	8.0	6.1	7.9	4.6	10.1	6.5	7.0	3.2	4.0	2.2	2.5	2.1
23	9.8	6.2	8.4	6.3	9.4	6.2	7.2	3.7	4.2	1.5	2.7	2.2
24	9.0	6.7	7.7	3.6	12.0	5.7	7.9	4.5	3.3	2.1	2.4	2.3
25	7.2	6.2	6.1	4.2	11.3	5.2	7.6	4.3	3.0	1.9	2.5	2.4
26	8.6	6.7	7.4	5.8	8.8	4.2	5.6	2.2	2.8	1.7	2.7	2.5
27	8.0	7.2	7.4	6.9	4.7	2.0	4.2	1.8	1.7	1.3	2.8	2.7
28	8.4	6.8	7.6	6.8	5.3	2.1	4.7	2.8	3.5	1.4	2.9	2.8
29	8.5	7.6	7.3	6.5	7.9	1.9	3.1	1.6	3.3	1.7	3.0	2.8
30	8.7	7.2	6.4	5.6	5.4	1.9	4.2	2.9	4.4	2.4	3.0	2.9
31	---	---	5.9	5.2	---	---	3.2	1.7	8.4	2.5	---	---
MONTH	15.0	6.1	10.2	3.6	12.0	1.9	13.0	1.6	8.4	1.3	5.9	1.2
YEAR	15.0	0.0										

04198005 SANDUSKY RIVER BELOW FREMONT, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	15.5	---	---	7.5	6.0	1.0	0.5	0.5	0.0	5.5	4.0
2	16.5	15.0	---	---	8.0	7.0	1.0	0.5	1.0	0.5	4.5	3.5
3	15.5	14.0	---	---	7.5	6.5	1.5	0.5	1.5	0.5	4.0	2.5
4	15.5	14.0	13.0	12.5	7.0	5.5	1.5	0.5	1.5	0.5	2.5	1.0
5	15.0	14.0	12.5	11.5	5.5	5.5	1.0	0.0	1.5	0.0	3.0	1.5
6	16.0	14.5	11.5	10.5	---	---	0.5	0.0	0.5	0.0	3.0	2.5
7	16.5	15.0	10.5	10.0	---	---	0.5	0.0	1.0	0.5	2.5	1.5
8	16.5	15.5	10.5	9.5	---	---	1.5	0.0	0.5	0.0	1.5	0.5
9	17.5	16.5	10.5	9.5	---	---	1.0	0.5	0.0	0.0	1.0	0.0
10	17.5	16.0	11.5	10.5	---	---	0.5	0.5	0.0	0.0	1.0	0.0
11	16.5	15.5	11.5	11.0	3.5	---	0.5	0.5	0.5	0.0	1.0	0.0
12	16.0	15.0	11.5	11.5	3.5	2.5	1.0	0.5	0.5	0.5	1.5	0.5
13	16.5	15.0	11.5	11.5	2.5	2.0	0.5	0.5	0.5	0.0	3.5	2.0
14	16.0	14.0	11.0	9.5	2.5	2.0	1.0	0.5	0.5	0.0	4.5	2.0
15	14.0	14.0	9.5	7.5	2.5	1.5	1.0	0.5	0.5	0.0	6.0	4.5
16	15.5	14.0	7.5	5.0	1.5	1.0	1.0	0.5	0.5	0.0	4.5	4.0
17	13.5	12.0	6.0	5.5	2.0	1.5	1.0	0.5	0.5	0.0	4.0	3.0
18	13.0	11.0	5.5	5.5	2.5	1.5	1.5	0.0	0.5	0.0	3.0	2.5
19	12.5	11.0	6.0	5.0	3.0	2.0	0.5	0.5	0.5	0.0	3.0	2.5
20	12.0	11.5	13.0	5.0	2.5	2.5	0.5	0.5	0.5	0.0	2.5	1.5
21	12.0	---	---	---	2.5	1.5	0.5	0.0	0.5	0.0	3.0	1.0
22	---	---	---	---	1.5	1.0	0.5	0.5	0.0	0.0	3.0	2.0
23	12.5	11.5	---	---	2.0	1.5	1.5	0.5	0.0	0.0	2.5	1.5
24	13.0	11.5	0.5	0.0	1.5	0.0	1.0	0.5	0.0	0.0	3.0	1.0
25	11.5	---	0.0	0.0	---	---	1.0	0.5	1.0	0.0	2.5	1.5
26	---	---	0.5	0.0	---	---	1.0	0.5	2.0	0.5	3.0	2.0
27	15.5	15.5	1.5	0.5	---	---	1.0	0.5	4.0	2.0	4.0	2.5
28	15.5	15.0	3.5	1.5	1.0	0.5	1.0	0.5	4.0	3.0	5.5	3.5
29	15.5	15.0	4.0	2.5	1.0	0.5	0.5	0.5	---	---	6.0	5.0
30	---	---	4.5	3.5	1.0	0.5	1.0	0.5	---	---	6.5	4.5
31	---	---	---	---	1.0	0.5	0.5	0.0	---	---	7.0	5.0
MONTH	17.5	11.0	13.0	0.0	---	---	1.5	0.0	4.0	0.0	7.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	---	---	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	---	---
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	[illegible]	[illegible]										

04198018 WEST BRANCH HURON RIVER NEAR WILLARD, OHIO

LOCATION.--Lat 41°05'28", long 82°39'04", Huron County, on left bank at downstream abutment of bridge on Maple Ridge Road, 4.5 miles northeast of Willard, and 2.0 miles downstream from Walnut Creek.

DRAINAGE AREA.--86 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1968 to September 1971.
Water temperatures: December 1968 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 1,120 micromhos Feb. 2; minimum, 246 micromhos Feb. 20.
Water temperatures: Maximum, 31.5°C June 28; minimum, 0.5°C Nov. 25.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.							
13...	1600	--	--	--	--	--	--
15...	1630	194	6	150	32	.3	14
28...	1700	239	0	200	30	.2	3.1
NOV.							
13...	1230	212	0	200	28	.6	1.4
30...	1705	144	0	150	26	.5	32
DEC.							
13...	1715	89	0	130	18	.5	46
17...	1645	184	9	190	30	1.3	18
JAN.							
03...	1600	254	0	170	35	.4	4.1
06...	1630	178	0	140	19	.4	26
FEB.							
19...	1265	58	0	46	13	.3	13
22...	1715	78	0	50	12	.3	21
MAR.							
15...	1700	103	0	110	29	.1	30
26...	1730	204	0	180	26	.3	14
APR.							
05...	1630	182	0	100	25	.2	3.0
30...	1730	226	0	190	32	.2	1.5
MAY							
22...	1730	276	0	180	24	.3	2.3
26...	1645	127	0	110	21	.2	40
JUNE							
09...	1130	--	--	--	--	--	--
11...	1730	150	0	200	26	.3	4.0
16...	--	303	0	210	27	.3	2.3
JULY							
07...	1645	270	0	240	30	.3	1.2
27...	1645	196	0	120	31	.3	9.7
AUG.							
04...	1630	272	0	180	28	.3	.8
16...	1840	204	0	200	52	.3	.8
SEP.							
01...	1630	274	0	190	35	.3	.8
21...	1700	230	0	170	20	.3	.9

04198018 WEST BRANCH HURON RIVER NEAR WILLARD, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1968-69, 1970-71): Maximum, 1,620 micromhos Apr. 24, 1969; minimum, 140 micromhos July 5, 1969.
Water temperatures (1968-69, 1970-71): Maximum, 31.5°C June 28, 1971; minimum, freezing point on many days during December 1968 to February 1969.

REMARKS.--Continuous water-quality recorder operated since December 1968. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
13...	--	--	--	--	--	56	4.2
15...	506	320	151	784	8.3	--	--
28...	556	380	184	836	8.2	--	--
NOV.							
13...	488	350	180	845	8.0	--	--
30...	400	290	170	618	8.2	--	--
DEC.							
13...	388	230	160	518	7.2	--	--
17...	534	360	190	735	8.4	--	--
JAN.							
03...	504	370	160	786	8.0	--	--
06...	434	300	150	629	7.5	--	--
FEB.							
19...	168	100	94	259	6.6	--	--
22...	204	130	66	304	7.5	--	--
MAR.							
15...	356	220	140	521	7.9	--	--
26...	490	350	180	712	8.2	--	--
APR.							
05...	474	340	190	695	7.7	--	--
30...	546	390	200	785	7.8	--	--
MAY							
22...	546	400	170	796	7.9	--	--
26...	374	270	160	566	7.2	--	--
JUNE							
09...	--	--	--	--	--	27	1.3
11...	504	330	210	765	7.9	--	--
16...	592	450	200	879	8.1	--	--
JULY							
07...	646	460	240	921	8.1	--	--
27...	398	270	110	618	7.6	--	--
AUG.							
04...	536	410	190	787	8.2	--	--
16...	586	410	190	872	8.2	--	--
SEP.							
01...	558	400	180	875	8.0	--	--
21...	484	350	160	753	8.2	--	--

04198018 WEST BRANCH HURON RIVER NEAR WILLARD, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	692	618	869	828	1100	1050	583	534
2	---	---	---	---	752	652	841	812	1120	1070	630	583
3	---	---	---	---	791	731	825	791	1070	1060	670	626
4	---	---	---	---	746	600	815	492	1060	885	823	622
5	---	---	---	---	683	630	576	475	885	298	759	664
6	---	---	---	---	791	656	709	576	537	322	675	664
7	---	---	---	---	848	748	838	690	600	521	664	572
8	---	---	---	---	859	774	931	812	683	600	767	608
9	---	---	---	---	807	763	972	916	789	683	781	608
10	---	---	---	---	815	767	969	895	861	789	738	696
11	---	---	---	---	820	763	885	846	861	851	735	650
12	---	---	---	---	864	472	856	796	867	787	714	605
13	---	---	92	828	598	468	885	825	805	616	605	440
14	---	---	83	634	707	598	846	726	628	601	535	449
15	---	---	6	612	746	689	748	705	636	607	523	484
16	---	---	70	641	802	709	823	739	722	634	612	492
17	---	---	66	616	789	746	879	802	739	312	681	605
18	---	---	72	627	759	705	937	864	339	264	670	628
19	---	---	74	711	761	654	905	887	290	251	735	625
20	---	---	72	654	763	700	998	903	316	246	649	573
21	---	---	78	720	787	716	998	944	450	313	640	566
22	---	---	80	739	810	698	995	916	502	294	634	484
23	---	---	82	752	724	607	1000	926	433	316	665	546
24	---	---	99	789	783	630	1030	923	543	432	719	654
25	---	---	100	895	823	744	998	895	607	446	754	710
26	---	---	90	825	944	767	941	921	457	389	772	710
27	---	---	87	752	963	807	1020	916	514	431	786	713
28	---	---	75	731	944	836	1020	969	534	443	748	721
29	---	---	78	711	900	841	1050	1010	---	---	760	727
30	---	---	83	617	921	855	1040	1010	---	---	783	743
31	---	---	---	---	900	846	1070	1030	---	---	793	731
MONTH	---	---	---	---	963	468	1070	475	1120	246	823	440

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	795	761	82	747	---	---	860	835	759	716	859	816
2	818	751	84	650	---	---	887	857	785	757	864	841
3	764	712	79	656	---	---	880	839	791	765	864	848
4	784	675	81	748	---	---	866	837	796	759	869	848
5	758	695	76	711	---	---	872	835	805	767	854	828
6	747	682	74	573	---	---	868	842	859	805	848	833
7	775	692	58	536	---	---	911	866	864	848	872	836
8	782	656	56	533	---	---	876	791	856	836	874	846
9	802	726	59	527	717	465	812	785	856	838	874	843
10	711	706	63	555	734	491	854	793	851	796	877	841
11	802	729	69	607	735	521	841	477	807	770	859	838
12	816	752	66	583	729	688	895	475	833	783	861	841
13	743	600	63	546	723	700	763	507	848	830	867	780
14	725	663	69	546	773	695	776	685	861	838	800	778
15	726	616	65	607	719	695	830	720	887	861	873	783
16	701	667	69	636	744	718	841	776	877	868	830	778
17	701	643	67	632	754	734	900	772	856	823	928	836
18	689	641	69	643	762	735	937	885	868	828	850	812
19	690	625	70	652	770	761	---	---	869	833	828	793
20	735	645	---	---	771	747	---	---	905	867	768	725
21	752	710	---	---	808	767	---	---	897	868	770	711
22	784	683	---	---	789	777	---	---	887	848	798	757
23	761	683	---	---	776	771	---	---	867	846	843	758
24	783	687	---	---	819	796	883	504	911	838	825	751
25	792	711	---	---	872	796	916	697	946	820	859	781
26	786	717	---	---	823	807	861	612	836	789	852	776
27	796	762	---	---	833	786	856	677	895	789	807	787
28	807	767	---	---	867	837	545	610	900	869	823	794
29	825	785	---	---	861	837	665	767	872	866	832	822
30	767	765	---	---	862	821	697	652	866	843	846	823
31	---	---	---	---	---	---	720	607	869	838	---	---
MONTH	925	600	---	---	---	---	937	428	930	716	928	711
YEAR	1120	246										

04198018 WEST BRANCH HURON RIVER NEAR WILLARD, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	11.0	7.0	1.5	1.0	1.5	1.5	7.0	3.5
2	---	---	---	---	11.0	7.5	1.5	1.0	1.5	1.5	6.5	4.0
3	---	---	---	---	9.5	6.5	1.5	1.0	1.5	1.5	4.0	1.5
4	---	---	---	---	9.0	5.0	2.5	1.0	1.5	1.5	4.0	1.0
5	---	---	---	---	5.0	2.5	2.0	1.0	2.0	1.5	4.0	1.0
6	---	---	---	---	2.5	1.0	1.0	1.0	2.0	1.5	4.5	3.5
7	---	---	---	---	1.5	1.0	1.0	1.0	1.5	1.5	4.0	1.5
8	---	---	---	---	2.5	1.0	1.5	1.0	1.5	1.5	2.0	1.0
9	---	---	---	---	5.5	2.5	1.5	1.0	1.5	1.5	3.0	1.0
10	---	---	---	---	5.0	3.0	1.0	1.0	1.5	1.5	2.5	1.5
11	---	---	---	---	5.0	4.0	1.0	1.0	1.5	1.5	3.5	2.0
12	---	---	---	---	5.5	5.0	1.5	1.0	1.5	1.5	5.0	2.5
13	---	---	10.5	9.5	5.0	4.0	1.5	1.0	1.5	1.5	5.5	3.0
14	---	---	9.5	7.0	4.0	3.0	1.5	1.0	1.5	1.5	10.0	3.5
15	---	---	7.0	4.0	3.0	1.5	1.5	1.5	1.5	1.5	10.0	7.0
16	---	---	5.0	3.0	3.0	1.0	1.5	1.0	1.5	1.5	7.0	4.0
17	---	---	5.5	2.5	3.5	3.0	2.0	1.5	1.5	1.5	4.5	2.5
18	---	---	6.0	3.5	3.5	3.0	2.0	1.5	2.0	1.5	4.5	2.5
19	---	---	6.5	4.0	6.0	3.5	2.0	1.5	2.0	1.5	4.5	4.0
20	---	---	8.5	6.0	5.0	2.0	2.0	1.5	2.0	2.0	4.0	2.0
21	---	---	7.5	5.0	2.5	2.0	2.0	1.5	2.5	1.5	6.5	1.0
22	---	---	7.0	4.0	4.0	2.5	2.0	1.5	2.5	2.0	6.5	4.5
23	---	---	3.5	1.0	5.5	4.0	2.0	1.5	3.0	2.0	5.0	3.0
24	---	---	1.0	1.0	4.0	1.0	2.0	1.5	3.5	1.5	6.0	2.0
25	---	---	1.0	0.5	1.0	1.0	1.5	1.5	6.0	2.0	5.5	3.0
26	---	---	1.5	1.0	1.0	1.0	1.5	1.5	6.5	4.0	8.0	3.5
27	---	---	4.5	1.5	1.0	1.0	1.5	1.5	7.0	5.5	9.0	4.5
28	---	---	5.5	4.5	1.0	1.0	1.5	1.5	5.5	3.0	12.0	9.0
29	---	---	8.0	5.5	1.0	1.0	1.5	1.5	---	---	10.0	7.0
30	---	---	8.0	7.0	1.0	1.0	1.5	1.5	---	---	9.5	5.5
31	---	---	---	---	1.5	1.0	1.5	1.5	---	---	12.5	6.5
MONTH	---	---	---	---	11.0	1.0	2.5	1.0	7.0	1.5	12.5	1.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.0	11.5	6.0	---	---	28.0	24.0	24.0	16.5	22.5	18.5
2	10.5	7.5	10.0	7.0	---	---	27.5	21.5	25.0	18.5	23.0	19.5
3	8.5	6.0	14.0	7.0	---	---	27.0	18.5	23.0	20.5	22.5	20.0
4	9.5	4.5	14.5	6.5	---	---	26.5	19.5	22.0	18.5	25.0	20.5
5	9.0	6.0	14.0	9.5	---	---	25.5	22.5	24.0	16.5	26.5	21.0
6	10.0	5.0	14.0	11.0	---	---	25.5	21.5	24.0	16.5	25.5	22.0
7	12.5	5.5	13.5	10.5	---	---	27.5	20.0	24.5	17.5	26.0	21.0
8	15.0	7.5	16.5	11.5	---	---	26.5	21.5	26.0	18.5	27.0	21.0
9	15.5	10.0	18.0	12.0	21.0	17.5	28.0	23.5	27.0	19.5	25.5	21.0
10	15.5	8.5	19.5	12.0	23.0	14.0	26.5	23.0	26.5	22.0	24.0	18.0
11	15.0	8.0	18.0	14.0	21.5	16.5	25.0	21.5	26.0	22.0	22.5	20.5
12	14.0	8.5	16.0	12.5	23.5	18.0	26.0	20.5	25.5	18.0	22.5	18.5
13	11.0	6.0	14.5	10.5	20.0	20.0	27.0	21.5	25.5	17.5	20.5	17.5
14	10.0	4.0	19.0	12.0	23.5	20.5	26.0	20.0	25.0	19.0	22.0	15.5
15	9.5	4.5	20.5	14.0	23.5	19.0	28.5	20.0	24.0	21.5	21.0	17.5
16	13.0	5.0	22.5	16.0	25.0	17.5	28.5	21.0	25.5	18.0	19.5	16.0
17	13.0	8.5	24.0	15.5	25.5	18.0	28.0	23.0	25.0	16.0	17.5	15.5
18	15.5	8.5	26.0	18.0	28.0	18.5	28.5	20.5	25.5	17.0	18.5	14.5
19	15.5	7.5	21.5	19.5	26.5	21.5	---	---	24.5	18.5	17.5	16.0
20	16.5	7.5	---	---	28.0	21.5	---	---	25.5	21.5	17.0	15.5
21	11.5	7.5	---	---	26.0	22.5	---	---	25.0	22.0	18.0	13.5
22	9.0	6.0	---	---	26.0	18.5	---	---	26.0	20.0	18.5	13.5
23	13.0	6.5	---	---	25.0	17.5	---	---	25.5	20.0	19.0	14.5
24	9.5	8.5	---	---	26.0	20.5	---	---	24.5	16.0	18.0	13.0
25	12.0	9.5	---	---	27.5	22.0	---	---	24.0	18.5	14.5	11.5
26	12.5	6.0	---	---	26.5	17.5	23.0	20.5	26.0	20.5	16.5	13.5
27	9.0	5.0	---	---	28.0	20.5	22.5	18.0	21.5	19.0	18.5	15.5
28	12.0	7.5	---	---	31.5	24.5	23.0	18.0	21.0	17.5	22.0	15.0
29	8.5	7.0	---	---	28.5	24.0	25.0	19.0	23.0	17.0	24.0	19.5
30	11.0	5.0	---	---	28.5	23.5	21.5	18.5	23.0	18.0	24.5	19.0
31	---	---	---	---	---	---	23.5	17.5	23.0	20.0	---	---
MONTH	16.5	4.0	---	---	---	---	---	---	27.0	16.0	27.0	11.5
YEAR	31.5	0.5										

04199100 HURON RIVER BELOW MILAN, OHIO

LOCATION.--Lat 41°20'06", long 82°34'38", Erie County, on right bank at downstream side of bridge on Mason Road, 3.5 miles northeast of Milan, and 4.2 miles downstream from the gaging station at Milan.

DRAINAGE AREA.--385 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1968 to September 1971.
Water temperatures: June 1968 to September 1971.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.								
13...	1530	--	--	--	--	--	--	--
13...	1730	56	187	0	160	41	.4	4.6
29...	1500	25	206	0	150	34	.4	6.4
NOV.								
03...	1500	66	214	13	180	33	.3	3.4
12...	1500	30	215	7	180	38	.4	7.3
DEC.								
01...	1500	259	152	0	140	27	.4	21
30...	0800	80	198	0	170	40	.3	30
JAN.								
05...	1600	640	154	0	160	25	.3	15
30...	1600	34	255	19	150	45	.3	9.2
FEB.								
02...	1600	32	321	0	160	56	.3	7.1
MAR.								
17...	1600	566	118	0	120	27	.3	33
28...	1500	167	180	0	160	33	.2	19
APR.								
10...	1900	72	174	0	190	34	.3	4.6
26...	1000	55	214	0	160	35	.3	3.4
MAY								
04...	2000	53	223	0	180	35	.3	3.0
11...	1100	--	164	0	150	29	.2	2.5
JUNE								
08...	1000	62	180	0	160	33	.3	5.4
09...	1300	--	--	--	--	--	--	--
29...	2000	43	186	10	180	63	.3	5.1
JULY								
06...	1550	14	190	0	180	50	.3	3.8
13...	1600	40	150	0	140	25	.2	6.8
AUG.								
18...	1330	11	176	0	150	46	.2	3.9
31...	2000	9.6	196	0	180	50	.2	4.1
SEP.								
22...	1230	16	192	4	180	85	.3	7.1
28...	1230	14	200	0	190	78	.3	5.4

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	733	694	751	742	636	565	852	834	1020	976	---	---
2	760	733	744	726	636	619	864	852	1040	1020	571	559
3	769	751	770	743	654	636	867	843	1050	1040	589	571
4	769	766	779	762	672	648	861	762	1220	1040	640	585
5	769	748	768	756	693	672	762	591	1280	298	664	622
6	740	706	786	765	726	653	591	569	346	307	676	645
7	711	671	857	771	762	726	600	555	409	346	688	487
8	653	617	771	750	768	709	657	600	427	409	511	465
9	696	649	768	750	720	655	675	633	---	---	562	511
10	716	683	777	765	729	717	726	675	---	---	622	562
11	715	703	780	726	729	726	768	726	---	---	666	622
12	717	708	780	771	732	652	820	768	---	---	637	631
13	715	668	777	771	692	626	840	818	---	---	637	541
14	686	671	777	768	540	465	867	825	---	---	566	487
15	720	696	765	723	---	---	903	861	---	---	535	511
16	732	697	756	648	663	612	906	856	---	---	514	496
17	726	719	672	645	687	663	906	846	---	---	559	511
18	737	736	666	666	690	660	890	838	---	---	604	555
19	735	723	686	667	675	561	871	850	---	---	631	606
20	720	653	699	675	675	667	915	871	---	---	625	559
21	712	723	717	709	678	583	878	663	---	---	606	563
22	720	666	720	696	---	---	899	662	---	---	606	586
23	750	720	732	663	711	674	895	866	---	---	612	625
24	751	725	760	729	678	662	936	892	---	---	628	627
25	720	702	750	750	669	635	949	913	---	---	663	628
26	768	723	843	758	675	667	915	762	---	---	673	663
27	758	750	827	801	711	675	956	901	---	---	682	664
28	758	765	801	777	768	711	936	916	---	---	651	632
29	765	751	777	759	786	766	958	926	---	---	696	609
30	753	726	768	633	813	786	870	863	---	---	723	651
31	786	726	---	---	837	813	981	813	---	---	720	657
MEAN	725	687	752	717	677	676	881	863	---	---	626	565

04199100 HURON RIVER BELOW MILAN, OHIO--Continued

REMARKS.--Continuous water-quality recorder operated since June 1968. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for 04199000 Huron River at Milan, Ohio (drainage area 371 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
13...	--	--	--	--	--	6.0	5.0
13...	2.1	402	290	140	692	--	--
29...	2.1	458	340	170	734	--	--
NOV.							
03...	.98	492	370	170	758	--	--
12...	1.6	494	360	170	789	--	--
DEC.							
01...	.36	368	280	160	610	--	--
30...	.76	510	370	210	784	--	--
JAN.							
05...	.26	412	280	150	624	--	--
30...	1.2	638	460	220	961	--	--
FEB.							
02...	1.3	712	490	230	1050	--	--
MAR.							
17...	.26	342	240	140	535	--	--
28...	.48	460	320	170	680	--	--
APR.							
10...	.58	436	320	180	647	--	--
26...	.72	502	360	180	755	--	--
MAY							
04...	1.6	506	360	180	777	--	--
11...	.70	412	310	160	647	--	--
JUNE							
08...	1.0	446	310	160	690	--	--
09...	--	--	--	--	--	11	.5
29...	1.7	572	350	180	857	--	--
JULY							
06...	1.3	488	330	170	765	--	--
13...	.96	346	260	140	581	--	--
AUG.							
18...	1.7	440	280	140	694	--	--
31...	1.7	516	320	160	789	--	--
SEP.							
22...	2.6	534	330	160	864	--	--
28...	2.5	530	350	180	891	--	--

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	709	700	825	807	---	---	---	---	720	701	---	---
2	712	700	820	800	---	---	---	---	723	711	943	810
3	715	706	803	793	---	---	---	---	723	711	894	828
4	715	700	810	800	---	---	---	---	733	706	882	840
5	719	706	810	798	---	---	---	---	726	712	1000	846
6	718	709	813	770	---	---	---	---	712	694	912	849
7	719	697	790	733	---	---	---	---	706	685	1020	867
8	715	694	797	735	---	---	---	---	703	688	930	871
9	715	694	793	693	---	---	---	---	---	---	873	862
10	709	694	687	650	---	---	---	---	---	---	870	852
11	704	691	690	677	---	---	---	---	---	---	895	818
12	706	696	667	633	---	---	---	---	---	---	891	815
13	727	697	678	663	---	---	---	---	---	---	---	---
14	768	727	693	653	---	---	---	---	---	---	878	767
15	769	750	720	687	---	---	---	---	---	---	863	803
16	773	760	700	673	---	---	---	---	---	---	---	---
17	793	768	687	673	766	733	---	---	---	---	---	---
18	769	765	700	697	791	756	---	---	---	---	---	---
19	783	760	726	650	763	754	---	---	---	---	---	---
20	777	757	726	717	---	---	---	---	---	---	---	---
21	783	757	---	---	---	---	---	---	---	---	920	866
22	783	767	---	---	---	---	---	---	---	---	949	868
23	763	[illegible]	---	---	---	---	---	---	---	---	---	---
24	773	762	---	---	---	---	---	---	---	---	---	---
25	783	[illegible]	---	---	---	---	---	---	---	---	---	---
26	792	762	---	---	---	---	643	606	---	---	---	---
27	793	767	---	---	---	---	637	616	---	---	---	---
28	795	788	---	---	---	---	673	595	---	---	---	---
29	805	783	---	---	---	---	724	651	---	---	943	868
30	817	825	---	---	---	---	722	711	882	782	863	842
31	---	---	---	---	---	---	740	675	---	---	---	---
MONTH	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---

04199100 HURON RIVER BELOW MILAN, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.1	7.9	7.9	7.7	10.7	7.7	8.0	7.9	8.3	7.4	---	---
2	8.1	7.8	8.0	7.8	10.5	8.1	8.0	7.9	---	---	7.8	7.7
3	8.0	7.9	8.2	8.0	9.6	8.2	8.0	7.9	---	---	8.3	7.8
4	8.0	7.9	8.1	7.9	8.7	8.3	8.8	8.0	---	---	8.3	7.8
5	8.0	7.9	8.1	8.0	8.7	8.2	9.4	8.1	---	---	7.9	7.8
6	7.9	3.5	8.1	8.1	8.8	8.7	8.2	7.9	---	---	9.8	7.9
7	8.0	5.4	8.1	8.0	8.7	8.5	8.1	7.9	---	---	9.2	8.2
8	7.9	7.7	8.3	8.0	8.7	8.4	7.9	7.8	---	---	8.2	8.0
9	7.9	7.8	8.3	8.2	9.1	8.5	8.2	7.6	---	---	9.4	7.7
10	8.1	7.9	8.3	8.2	9.3	8.5	7.8	7.5	---	---	9.8	9.2
11	8.0	7.9	8.2	8.1	8.9	8.5	7.8	7.6	---	---	9.5	8.3
12	7.9	7.8	9.2	8.0	8.7	8.2	7.9	7.7	---	---	9.8	8.9
13	7.9	7.7	8.0	7.9	8.5	8.2	7.9	7.8	---	---	9.6	8.6
14	7.9	7.6	8.1	7.9	8.3	8.1	7.9	7.7	---	---	9.9	9.5
15	8.2	7.9	8.2	7.9	---	---	8.1	7.8	---	---	9.8	8.0
16	8.4	8.1	8.2	8.1	9.5	8.3	8.1	8.0	---	---	9.0	7.9
17	8.4	8.3	8.2	8.1	9.4	8.5	8.1	8.0	---	---	9.0	7.7
18	8.4	8.2	9.2	8.1	10.3	8.5	8.1	8.0	---	---	9.4	8.7
19	8.4	8.2	8.4	8.2	10.6	8.3	8.2	8.0	---	---	10.0	9.4
20	8.3	8.2	9.6	8.2	8.3	8.2	8.0	7.9	---	---	9.8	8.6
21	8.4	8.1	8.3	8.0	8.2	7.8	8.0	7.9	---	---	9.6	8.8
22	8.3	7.9	8.6	8.1	7.9	7.8	7.9	7.5	---	---	9.3	7.5
23	8.4	8.2	8.7	8.4	8.9	7.9	8.0	7.7	---	---	8.3	7.1
24	8.4	8.2	8.5	8.1	8.5	8.3	10.3	7.8	---	---	8.7	7.0
25	8.5	8.3	8.3	8.2	8.3	8.2	7.9	7.8	---	---	8.3	7.0
26	8.3	8.2	8.4	8.2	8.4	8.2	8.8	7.8	---	---	7.4	7.0
27	8.3	8.1	10.5	8.1	8.2	8.2	8.5	8.2	---	---	7.7	7.1
28	8.2	8.1	9.7	8.7	8.3	8.1	8.3	8.1	---	---	8.8	7.3
29	8.1	7.8	10.2	8.7	8.2	8.1	8.2	7.9	---	---	8.6	7.4
30	7.9	7.8	8.8	7.8	8.7	7.9	8.6	8.0	---	---	7.7	7.4
31	7.8	7.6	---	---	8.0	7.8	8.2	7.1	---	---	7.9	7.5
MONTH	8.5	3.5	10.5	7.7	10.7	7.7	10.3	7.1	---	---	10.0	7.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	7.5	8.4	8.3	---	---	---	---	8.7	7.0	8.2	7.9
2	8.1	7.6	8.6	8.4	---	---	---	---	8.8	7.2	8.5	8.1
3	8.0	7.7	8.5	8.3	---	---	---	---	8.9	8.5	8.4	8.2
4	8.1	7.9	8.5	8.4	---	---	---	---	9.1	8.8	8.3	8.1
5	8.1	7.9	8.4	8.3	---	---	---	---	9.3	8.5	8.2	7.7
6	8.2	8.0	8.4	7.8	---	---	---	---	9.4	8.2	8.0	7.9
7	8.1	8.1	8.3	8.0	---	---	---	---	9.5	8.4	7.9	7.7
8	8.1	8.0	8.3	8.1	---	---	---	---	9.4	8.1	7.9	7.5
9	8.3	8.0	8.6	8.2	---	---	---	---	---	---	8.0	7.8
10	8.3	8.2	8.6	8.1	---	---	---	---	---	---	8.1	7.7
11	8.3	8.2	8.4	8.0	---	---	---	---	---	---	8.1	7.9
12	8.4	8.2	8.5	7.9	---	---	---	---	---	---	8.0	7.8
13	8.8	8.4	8.2	7.8	---	---	---	---	---	---	7.9	7.8
14	8.5	8.0	8.7	8.2	---	---	---	---	---	---	7.8	7.6
15	8.2	8.0	8.6	8.2	---	---	---	---	---	---	7.8	7.6
16	8.3	8.1	8.5	8.1	---	---	---	---	---	---	7.8	7.7
17	8.3	8.0	8.3	7.9	8.6	8.0	---	---	---	---	7.8	7.7
18	8.2	7.9	8.3	7.9	8.9	8.4	---	---	---	---	7.8	7.7
19	9.6	8.1	8.3	7.7	8.8	8.5	---	---	---	---	7.8	7.6
20	8.3	8.1	8.0	7.8	---	---	---	---	---	---	7.8	7.6
21	8.2	8.0	---	---	---	---	---	---	---	---	7.9	7.8
22	8.2	8.0	---	---	---	---	---	---	---	---	7.9	7.9
23	8.3	8.1	---	---	---	---	---	---	---	---	7.9	7.8
24	8.4	8.2	---	---	---	---	---	---	---	---	8.0	7.8
25	8.3	8.1	---	---	---	---	---	---	---	---	8.0	7.9
26	8.4	8.1	---	---	---	---	7.9	7.2	---	---	8.0	7.9
27	8.5	8.2	---	---	---	---	8.3	7.1	---	---	8.0	8.0
28	8.4	8.2	---	---	---	---	8.1	7.1	---	---	8.1	8.0
29	8.4	8.2	---	---	---	---	8.4	6.8	---	---	8.2	8.0
30	8.3	8.2	---	---	---	---	8.4	7.6	8.1	7.3	8.3	8.1
31	---	---	---	---	---	---	8.4	7.1	8.1	7.8	---	---
MONTH	9.6	7.5	---	---	---	---	---	---	---	---	8.5	7.5

04199100 HURON RIVER BELOW MILAN, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.1	7.7	7.1	4.7	11.0	10.6	11.4	11.2	---	---	---	---
2	8.1	6.0	7.2	6.5	10.6	9.9	11.4	11.1	---	---	11.3	10.8
3	7.7	6.7	8.3	7.2	10.8	10.2	11.3	11.1	---	---	11.4	10.8
4	7.7	6.7	9.0	6.3	10.8	9.8	11.4	10.9	---	---	11.5	10.9
5	7.8	6.9	9.8	8.9	11.6	10.0	13.5	11.0	---	---	11.8	10.9
6	8.4	7.0	10.8	9.0	11.8	11.4	13.6	13.2	---	---	11.9	11.1
7	8.1	6.3	10.0	9.5	12.6	11.8	13.7	11.7	---	---	11.8	11.3
8	7.8	6.1	10.8	9.3	12.7	12.1	13.5	13.3	---	---	12.1	11.2
9	7.9	6.8	11.5	10.7	12.3	11.5	13.3	13.1	---	---	13.0	11.7
10	7.8	7.1	11.8	10.6	11.7	10.3	13.1	12.9	---	---	12.5	12.1
11	7.2	6.5	10.6	9.5	10.9	10.0	13.0	12.7	---	---	12.7	12.2
12	6.7	6.1	9.5	7.5	10.1	9.6	12.8	12.5	---	---	12.9	12.3
13	7.1	5.8	7.5	6.1	9.8	9.5	12.8	12.4	---	---	12.7	12.1
14	7.4	5.7	8.1	6.7	9.6	9.0	12.5	12.1	---	---	12.7	11.6
15	8.6	7.4	9.2	7.8	---	---	12.2	9.0	---	---	11.7	11.5
16	10.0	8.2	11.7	10.0	13.2	13.0	9.5	8.9	---	---	12.3	11.6
17	11.0	10.0	12.0	11.5	13.1	12.6	9.3	8.9	---	---	13.1	12.3
18	11.3	10.5	12.1	11.5	12.8	12.3	9.0	8.5	---	---	13.2	12.7
19	11.0	10.2	12.1	11.4	12.3	11.8	8.6	8.3	---	---	12.8	12.5
20	10.6	10.2	11.9	9.6	12.2	11.7	8.4	8.1	---	---	13.3	12.5
21	10.2	9.3	10.8	10.2	12.4	11.9	8.1	7.8	---	---	13.6	13.0
22	9.5	7.4	11.4	9.9	12.3	11.9	7.9	7.5	---	---	13.4	13.0
23	10.8	9.0	11.8	10.7	12.0	11.7	8.2	7.5	---	---	13.5	12.8
24	11.1	9.9	11.7	11.2	12.3	11.5	7.8	7.5	---	---	13.8	12.9
25	12.0	9.9	11.8	11.1	12.2	11.8	8.3	7.6	---	---	13.8	12.6
26	10.2	9.4	12.0	11.6	12.0	11.7	7.7	5.8	---	---	13.7	13.0
27	9.4	9.0	12.0	11.7	11.8	11.5	7.6	6.6	---	---	13.3	12.1
28	9.4	8.9	11.9	11.6	11.8	11.5	7.8	7.5	---	---	13.1	11.7
29	9.0	5.5	11.6	11.1	11.6	11.4	7.7	7.2	---	---	12.6	11.0
30	6.4	5.1	11.3	10.6	11.6	11.3	---	---	---	---	13.4	11.8
31	5.1	4.4	---	---	11.5	11.3	---	---	---	---	13.5	12.4
MONTH	12.0	4.4	12.1	4.7	13.2	9.0	13.7	5.8	---	---	13.8	10.8

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.6	11.0	10.1	9.1	---	---	---	---	12.7	7.1	7.8	5.4
2	13.2	11.0	10.0	8.7	---	---	---	---	13.1	8.2	9.3	6.6
3	14.3	12.5	9.2	8.4	---	---	---	---	11.9	9.0	9.3	7.0
4	14.6	13.7	10.9	8.3	---	---	---	---	11.1	8.6	8.7	6.3
5	15.0	13.2	10.9	9.2	---	---	---	---	11.8	9.3	6.8	5.4
6	15.0	13.1	9.6	6.5	---	---	---	---	13.0	9.8	6.8	4.6
7	15.0	13.7	11.1	7.3	---	---	---	---	14.1	10.0	5.9	4.5
8	15.0	12.8	10.9	9.0	---	---	---	---	12.9	10.1	8.1	4.0
9	14.8	11.2	11.7	9.4	---	---	---	---	---	---	7.1	4.5
10	15.0	10.8	11.4	8.3	---	---	---	---	---	---	7.7	4.7
11	15.0	11.9	10.8	7.3	---	---	---	---	---	---	6.6	5.0
12	15.0	12.9	8.1	6.5	---	---	---	---	---	---	5.9	4.5
13	15.0	11.0	9.6	5.9	---	---	---	---	---	---	4.9	4.1
14	11.0	8.5	11.0	8.9	---	---	---	---	---	---	5.2	3.8
15	12.1	9.7	10.9	7.9	---	---	---	---	---	---	4.8	3.8
16	12.7	9.9	9.7	7.2	---	---	---	---	---	---	4.8	4.0
17	12.3	8.1	10.1	5.6	13.0	7.7	---	---	---	---	4.2	3.8
18	10.8	8.0	9.0	5.4	14.9	10.0	---	---	---	---	4.7	3.5
19	11.1	8.2	8.0	5.7	13.8	10.2	---	---	---	---	4.9	3.8
20	10.7	8.1	7.4	5.8	---	---	---	---	---	---	6.2	3.6
21	9.8	7.6	---	---	---	---	---	---	---	---	6.8	5.6
22	9.5	7.1	---	---	---	---	---	---	---	---	7.0	6.4
23	10.7	8.8	---	---	---	---	---	---	---	---	6.8	6.0
24	10.1	9.3	---	---	---	---	---	---	---	---	7.7	5.9
25	9.4	8.1	---	---	---	---	---	---	---	---	7.8	6.2
26	9.9	9.4	---	---	---	---	9.9	6.3	---	---	7.9	6.3
27	10.1	8.8	---	---	---	---	8.1	5.1	---	---	7.9	7.1
28	10.0	8.8	---	---	---	---	8.1	4.5	---	---	8.9	7.0
29	9.7	8.9	---	---	---	---	11.1	6.3	---	---	9.6	7.1
30	9.3	8.5	---	---	---	---	9.1	6.9	8.9	9.1	10.9	7.7
31	---	---	---	---	---	---	10.9	6.2	7.9	5.9	---	---
MONTH	15.0	7.1	---	---	---	---	---	---	---	---	10.9	3.5

04199100 HURON RIVER BELOW MILAN, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	15.5	14.0	13.0	9.0	6.5	0.5	0.5	0.5	0.5	---	---
2	16.5	15.5	13.0	13.0	9.0	8.0	0.5	0.5	---	---	4.0	3.0
3	16.5	15.5	13.0	11.0	8.0	7.0	0.5	0.5	---	---	4.0	1.0
4	16.0	14.5	11.0	9.0	7.5	6.5	0.5	0.5	---	---	1.5	0.5
5	16.0	15.0	9.0	8.5	6.0	3.5	0.5	0.5	---	---	2.5	1.0
6	17.5	15.5	8.5	8.0	3.5	1.5	0.5	0.5	---	---	3.0	2.5
7	18.0	16.5	9.0	8.0	1.5	1.0	0.5	0.5	---	---	3.0	1.5
8	18.5	17.5	9.5	8.5	2.0	1.0	0.5	0.5	---	---	2.0	0.5
9	19.0	18.0	9.5	9.0	4.5	2.0	0.5	0.5	---	---	3.5	0.5
10	19.0	18.0	10.0	9.0	4.5	4.0	0.5	0.5	---	---	2.0	1.0
11	18.0	17.0	10.5	10.0	4.0	4.0	0.5	0.5	---	---	2.0	1.5
12	17.5	17.5	11.5	11.0	4.5	4.0	0.5	0.5	---	---	4.0	1.5
13	18.0	17.0	11.0	10.5	4.0	3.5	0.5	0.5	---	---	4.0	3.0
14	19.0	17.0	10.5	9.0	3.5	3.0	0.5	0.5	---	---	7.0	2.5
15	18.5	16.5	9.0	6.0	---	---	0.5	0.5	---	---	7.5	6.5
16	16.5	12.5	6.0	4.0	1.5	1.0	0.5	0.5	---	---	6.5	4.0
17	12.5	11.5	4.0	4.0	2.5	1.5	0.5	0.5	---	---	4.0	3.0
18	12.0	10.0	5.5	4.0	2.5	2.0	0.5	0.5	---	---	4.0	2.5
19	12.5	11.5	5.5	5.0	4.0	2.5	0.5	0.5	---	---	4.0	3.5
20	12.5	12.0	9.5	5.5	4.0	2.5	0.5	0.5	---	---	3.5	2.5
21	12.0	11.5	6.5	6.0	2.5	1.5	0.5	0.5	---	---	4.5	2.0
22	13.5	12.0	11.0	5.5	2.0	1.5	0.5	0.5	---	---	4.5	4.0
23	13.5	12.5	6.5	1.5	3.0	2.0	0.5	0.5	---	---	4.0	2.5
24	13.5	12.0	1.5	1.0	2.5	0.5	0.5	0.5	---	---	3.5	1.5
25	13.5	12.0	1.5	1.5	0.5	0.5	0.5	0.5	---	---	4.0	2.0
26	13.5	13.0	1.5	1.0	0.5	0.5	1.5	0.5	---	---	4.0	2.0
27	14.0	13.0	2.5	1.5	0.5	0.5	0.5	0.5	---	---	5.0	3.5
28	14.0	13.5	3.5	2.5	0.5	0.5	0.5	0.5	---	---	7.5	5.0
29	13.5	13.0	5.5	3.5	0.5	0.5	0.5	0.5	---	---	8.5	6.5
30	13.5	13.0	6.5	5.5	0.5	0.5	0.5	0.5	---	---	6.5	6.0
31	14.0	13.0	---	---	0.5	0.5	0.5	0.5	---	---	8.0	6.0
MONTH	19.0	10.0	14.0	1.0	9.0	0.5	1.5	0.5	---	---	8.5	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	7.0	12.0	10.5	---	---	---	---	24.5	22.0	25.0	23.5
2	8.5	7.0	12.5	11.5	---	---	---	---	24.0	22.5	24.5	24.0
3	7.0	5.5	13.5	11.5	---	---	---	---	23.5	23.0	24.5	24.0
4	7.0	5.5	14.5	11.5	---	---	---	---	23.5	22.5	25.5	23.5
5	7.5	5.5	14.0	12.5	---	---	---	---	24.5	22.0	26.0	24.0
6	6.5	5.5	15.5	14.0	---	---	---	---	25.5	22.0	26.5	25.0
7	8.5	5.0	15.0	13.5	---	---	---	---	25.5	22.5	26.0	25.0
8	10.5	7.0	15.5	14.0	---	---	---	---	26.0	23.0	27.5	25.0
9	12.0	9.0	18.5	15.5	---	---	---	---	---	---	27.0	25.5
10	12.5	10.5	20.0	16.0	---	---	---	---	---	---	26.5	25.0
11	12.5	10.5	20.0	17.0	---	---	---	---	---	---	25.5	25.0
12	14.0	11.5	19.0	17.5	---	---	---	---	---	---	25.5	24.5
13	14.5	14.0	19.5	17.5	---	---	---	---	---	---	24.5	23.0
14	14.5	11.0	17.5	14.5	---	---	---	---	---	---	24.0	22.5
15	13.0	10.5	19.5	15.5	---	---	---	---	---	---	23.0	22.5
16	14.0	10.5	20.0	17.5	---	---	---	---	---	---	22.5	22.0
17	15.5	12.0	22.5	19.0	26.0	24.0	---	---	---	---	22.0	21.0
18	15.5	13.5	23.0	20.5	26.5	24.5	---	---	---	---	22.0	20.5
19	16.0	14.0	24.5	22.5	27.5	25.0	---	---	---	---	21.0	20.5
20	17.0	14.0	24.0	23.0	---	---	---	---	---	---	20.5	19.5
21	16.0	15.0	---	---	---	---	---	---	---	---	20.0	18.5
22	15.0	12.5	---	---	---	---	---	---	---	---	19.0	15.0
23	13.5	11.0	---	---	---	---	---	---	---	---	15.5	14.5
24	12.5	11.5	---	---	---	---	---	---	---	---	17.0	14.5
25	13.0	11.5	---	---	---	---	---	---	---	---	14.5	13.5
26	12.0	11.0	---	---	---	---	25.0	24.0	---	---	14.0	13.5
27	12.0	11.0	---	---	---	---	24.5	24.0	---	---	14.5	14.0
28	12.0	11.0	---	---	---	---	24.0	22.5	---	---	19.0	15.5
29	11.0	10.5	---	---	---	---	24.0	22.5	---	---	20.0	18.5
30	13.0	10.5	---	---	---	---	23.0	22.5	26.5	24.0	21.0	19.5
31	---	---	---	---	---	---	24.0	22.0	25.0	24.5	---	---
MONTH	17.0	5.0	---	---	---	---	---	---	---	---	27.5	13.5

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04199500 VERMILION RIVER NEAR VERMILION, OHIO

LOCATION.--Lat 41°22'55", long 82°19'01", in T.6 N., R.19 W., Lorain County, 40 ft upstream from gaging station, at bridge on North Ridge Road, 3.5 miles southeast of Vermilion, and 4.5 miles upstream from mouth.

DRAINAGE AREA.--262 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1950 to February 1952, February 1969 to September 1971.
Water temperatures: March to August 1950, February 1969 to September 1971.
Sediment records: Water years 1970-71 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.								
13...	1815	41	164	0	140	50	.4	4.1
26...	1400	49	165	0	150	35	.4	12
NOV.								
07...	1130	45	144	0	130	23	.4	15
JAN.								
15...	1335	17[illegible]	184	0	130	29	.3	9.4
25...	1300	72	203	6	150	40	.3	6.7
FEB.								
03...	0900	6[illegible]	138	0	180	48	.3	5.9
19...	1400	220[illegible]	42	0	36	16	.2	12
MAR.								
16...	--	105[illegible]	94	0	78	19	.1	24
27...	1100	17[illegible]	140	0	110	25	.0	11
APR.								
06...	1600	8[illegible]	156	0	118	27	.3	1.6
27...	1630	3[illegible]	196	0	140	34	.4	1.0
MAY								
04...	1600	3[illegible]	151	0	140	31	.2	1.4
11...	1930	11[illegible]	142	0	110	24	.2	1.1
JUNE								
02...	0800	6[illegible]	167	0	110	24	.2	9.9
16...	1750	--	--	--	--	--	--	--
29...	1630	12	164	0	130	45	.3	1.8
JULY								
15...	1000	.8	170	4	120	60	.3	1.1
26...	1300	44	168	2	99	33	.3	3.8
28...	1455	--	--	--	--	--	--	--
AUG.								
03...	1310	5.0	144	1	99	43	.3	1.3
31...	2000	.98	164	3	160	62	.3	1.8
SEP.								
20...	1350	3.2	146	0	120	110	.3	6.4
28...	1335	11	142	0	120	42	.3	6.6

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	545	495	802	73[illegible]	918	518	---	---	---	---	---	---
2	936	459	807	71[illegible]	518	428	---	---	---	---	---	---
3	856	514	805	79[illegible]	600	506	---	---	---	---	---	---
4	587	492	---	---	616	580	---	---	---	---	---	---
5	552	444	---	---	652	616	841	785	---	---	---	---
6	802	423	576	56[illegible]	694	652	874	841	---	---	---	---
7	517	453	601	40[illegible]	726	694	905	874	---	---	---	---
8	521	452	548	42[illegible]	761	722	916	905	---	---	---	---
9	548	430	---	---	785	552	934	916	---	---	---	---
10	533	499	771	55[illegible]	608	567	---	---	---	---	---	---
11	569	504	647	60[illegible]	663	608	---	---	---	---	---	---
12	586	455	656	63[illegible]	716	607	---	---	---	---	---	---
13	887	514	692	63[illegible]	737	716	---	---	---	---	---	---
14	710	580	765	65[illegible]	776	737	---	---	---	---	---	---
15	610	554	820	76[illegible]	812	776	---	---	---	---	---	---
16	631	577	---	---	853	812	---	---	---	---	---	---
17	669	276	---	---	---	---	---	---	---	---	---	---
18	704	293	---	---	---	---	---	---	---	---	---	---
19	739	265	---	---	---	---	---	---	---	---	---	---
20	563	355	---	---	---	---	---	---	---	---	---	---
21	676	563	608	[illegible]	---	---	---	---	---	---	---	---
22	700	658	645	[illegible]	---	---	---	---	---	---	---	---
23	659	578	658	[illegible]	---	---	---	---	---	---	---	---
24	648	555	690	[illegible]	---	---	---	---	---	---	---	---
25	806	638	776	[illegible]	---	---	---	---	---	---	---	---
26	698	658	778	[illegible]	---	---	---	---	---	---	---	---
27	773	665	837	[illegible]	---	---	---	---	---	---	---	---
28	739	665	755	[illegible]	---	---	---	---	---	---	---	---
29	767	843	920	[illegible]	---	---	---	---	---	---	---	---
30	778	764	892	[illegible]	---	---	---	---	---	---	---	---
31	787	764	---	---	---	---	---	---	---	---	---	---
MONTH	936	265	---	---	---	---	---	---	---	---	---	---

04199500 VERMILION RIVER NEAR VERMILION, OHIO--Continued

REMARKS.--Continuous water-quality recorder operated since February 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected three times during the year to further define the quality of water. Sediment data for this station on page 404.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
13...	420	250	120	668	7.7	10	12
26...	440	290	150	640	7.6	--	--
NOV.							
07...	376	240	120	621	8.1	--	--
JAN.							
15...	420	290	139	631	7.7	--	--
25...	470	320	144	732	8.3	--	--
FEB.							
03...	476	290	177	868	8.1	--	--
19...	142	75	40	190	7.2	--	--
MAR.							
16...	256	170	93	391	7.8	--	--
27...	328	220	100	519	7.6	--	--
APR.							
06...	356	250	120	562	7.8	--	--
27...	438	300	140	662	8.1	--	--
MAY							
04...	426	260	140	672	8.0	--	--
11...	330	230	110	519	7.6	--	--
JUNE							
02...	344	260	120	531	8.2	--	--
16...	--	--	--	--	--	12	11
29...	416	280	130	658	8.2	--	--
JULY							
15...	416	280	130	698	8.3	--	--
26...	346	230	89	567	8.3	--	--
28...	--	--	--	--	--	--	2.1
AUG.							
03...	322	220	100	554	8.2	--	--
31...	454	280	140	735	8.3	--	--
SEP.							
20...	544	280	160	865	7.1	--	--
28...	350	250	130	594	7.2	--	--

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	518	501	704	648	557	536	746	737
2	---	---	---	---	545	507	650	637	555	536	746	742
3	---	---	---	---	553	537	657	639	564	549	748	744
4	---	---	---	---	561	537	653	646	575	553	753	706
5	---	---	---	---	561	550	663	650	586	575	729	715
6	---	---	---	---	565	558	669	660	594	586	720	713
7	---	---	---	---	581	561	668	662	609	525	722	711
8	---	---	---	---	562	536	673	658	623	570	728	715
9	---	---	---	---	548	536	673	657	630	619	728	720
10	---	---	---	---	558	533	669	658	655	620	739	727
11	---	---	535	519	608	544	694	657	631	583	734	730
12	---	---	532	522	639	561	680	654	666	630	749	730
13	---	---	540	525	581	360	689	680	675	657	761	690
14	---	---	542	537	678	542	687	679	678	669	752	734
15	---	---	555	537	759	649	674	665	675	655	745	738
16	---	---	555	533	716	598	665	652	682	669	747	738
17	---	---	580	540	683	605	652	635	695	673	776	745
18	---	---	594	575	670	601	640	626	702	634	789	770
19	---	---	605	564	659	601	670	615	718	697	791	780
20	---	---	587	575	632	612	615	601	728	715	898	775
21	---	---	591	584	724	671	628	615	733	703	812	760
22	---	---	597	589	656	618	675	613	731	714	783	707
23	---	---	605	555	763	632	621	565	729	709	711	703
24	---	---	639	529	742	645	632	604	713	696	998	700
25	---	---	616	356	733	628	615	598	716	705	985	654
26	---	---	645	372	787	647	609	592	725	712	702	694
27	---	---	613	372	789	630	597	542	727	712	698	655
28	---	---	660	413	785	676	591	552	721	714	683	567
29	---	---	673	460	---	---	620	591	730	712	558	443
30	---	---	696	471	758	650	619	581	743	725	---	---
31	---	---	511	456	---	---	594	556	744	737	---	---
MONTH	---	---	---	---	789	360	704	542	744	525	998	443

04199500 VERMILION RIVER NEAR VERMILION, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	16.0	8.0	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	26.5	13.0	---	---	---	---	---	---	---	---	---	---
13	16.0	13.0	---	---	---	---	---	---	---	---	---	---
14	18.0	13.5	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	15.0	12.0	22.0	19.0	32.5	26.0	26.0	18.5	25.5	20.0
2	---	---	15.0	11.5	23.5	19.5	30.5	23.0	27.5	20.0	25.0	21.5
3	---	---	17.5	12.5	26.5	21.0	30.5	21.0	25.5	22.0	25.5	20.5
4	---	---	18.0	13.5	28.0	23.0	28.5	21.0	25.0	20.5	28.0	22.0
5	---	--	17.5	13.0	28.0	24.0	28.0	24.0	27.0	17.5	29.0	22.0
6	---	---	16.5	13.5	28.0	25.0	32.0	23.5	28.0	17.5	29.5	23.0
7	---	---	15.5	13.5	29.0	24.0	31.5	22.5	29.0	18.0	29.0	22.5
8	11.5	7.5	17.5	13.0	25.5	19.5	28.5	24.0	30.0	21.0	31.5	22.5
9	13.5	---	18.5	14.0	22.5	18.0	32.0	24.5	30.0	21.5	27.5	27.5
10	13.0	10.0	20.0	15.0	24.0	18.0	28.0	24.5	29.5	23.5	28.0	19.0
11	14.0	12.0	19.5	15.5	23.0	19.0	27.5	22.0	29.0	22.5	24.0	22.0
12	---	---	18.0	15.5	25.5	21.5	27.5	21.0	28.0	18.5	26.5	20.0
13	15.0	11.0	17.5	15.5	25.0	20.5	27.0	21.5	28.5	19.0	22.5	19.0
14	13.5	11.0	20.0	17.5	24.5	22.5	29.5	21.0	27.5	20.5	25.0	18.5
15	13.5	11.5	20.5	15.0	22.5	21.0	27.0	22.0	25.5	22.5	22.5	18.5
16	15.0	10.0	21.0	17.5	25.0	19.5	29.0	19.5	27.5	19.5	20.0	17.0
17	14.5	11.5	24.0	17.5	26.0	21.0	28.0	20.5	28.0	17.5	18.5	17.0
18	16.0	13.0	25.5	19.5	28.0	21.5	28.0	19.0	29.5	18.5	21.5	15.0
19	17.0	13.0	26.5	24.0	29.0	23.5	24.0	22.0	27.0	17.0	20.0	16.5
20	17.0	13.5	25.0	21.0	31.0	24.5	26.5	19.5	27.0	22.0	19.0	17.0
21	17.0	13.5	26.5	19.5	25.5	23.5	28.0	20.0	30.0	22.0	21.0	15.0
22	14.5	11.0	24.0	19.0	27.5	21.0	29.0	21.0	29.0	20.5	20.0	15.5
23	17.5	11.0	24.0	18.5	27.5	21.0	27.5	22.5	27.5	20.5	20.5	14.5
24	17.0	9.0	23.0	15.5	27.5	23.5	24.5	22.5	26.0	18.5	19.5	14.0
25	15.5	9.0	19.5	14.5	29.5	24.0	27.0	21.0	27.0	19.5	15.0	11.5
26	13.5	11.5	16.0	14.5	27.5	23.0	26.0	22.5	28.0	21.0	17.5	14.0
27	14.5	10.0	15.5	14.5	29.0	23.0	24.0	20.5	25.5	20.0	17.5	10.0
28	13.0	14.5	18.0	13.0	25.5	20.0	25.0	19.5	24.0	19.5	23.0	17.0
29	14.0	11.0	19.0	14.0	25.0	21.5	26.5	22.0	29.0	18.0	24.5	20.0
30	13.5	11.0	22.0	14.5	31.0	26.5	23.0	21.0	30.5	19.0	24.5	18.0
31	---	---	22.5	17.0	---	---	25.5	19.0	29.0	21.5	---	---
MONTH	---	---	26.5	11.5	31.0	18.0	32.5	19.0	30.5	17.0	31.5	11.5

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04199900 EAST BRANCH BLACK RIVER AT GRAFTON, OHIO

LOCATION.--Lat 41°15'51", long 82°03'39", in T.4 N., R.16 W., Lorain County, on right downstream abutment of bridge on Crook Street at south edge of Grafton, and 14 miles upstream from West Branch Black River.

DRAINAGE AREA.--170 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1969 to September 1971.
Water temperatures: April 1969 to September 1971.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.							
14...	1315	86	0	90	26	.3	8.9
30...	1530	184	0	170	59	.3	2.6
NOV.							
04...	1530	88	0	82	25	.3	13
26...	1400	173	0	160	46	.2	6.1
DEC.							
15...	1700	100	0	95	22	.4	12
31...	1130	186	0	160	45	.1	9.2
JAN.							
07...	1100	83	0	96	24	.1	11
28...	1000	171	3	210	70	.2	6.8
FEB.							
02...	1045	154	0	230	87	.1	6.9
22...	0930	47	0	42	16	.1	7.9
MAR.							
16...	1730	92	0	87	27	.3	12
30...	1200	146	0	130	37	.2	5.3
APR.							
02...	1630	156	0	130	41	.2	2.8
29...	1830	212	0	160	62	.2	.8
MAY							
04...	1830	224	0	170	62	.2	1.2
27...	1900	102	0	84	29	.2	21
JUNE							
08...	1500	126	0	92	27	.2	8.5
16...	1600	--	--	--	--	--	--
24...	1720	200	7	130	62	.2	2.3
JULY							
07...	0800	242	0	130	58	.2	1.4
26...	2030	88	0	68	24	.2	7.2
AUG.							
02...	1745	168	0	120	100	.2	3.1
30...	1100	196	0	180	160	.2	1.5
SEP.							
02...	1400	216	0	160	140	.3	1.6
30...	1200	184	0	156	76	.3	1.3

04199900 EAST BRANCH BLACK RIVER AT GRAFTON, OHIO--Continued

REMARKS.--Continuous water-quality recorder operated since April 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
14...	256	150	80	406	6.9	15	4.8
30...	506	310	160	761	8.2	--	--
NOV.							
04...	268	160	88	403	7.1	--	--
26...	468	300	160	708	7.6	--	--
DEC.							
15...	290	180	98	440	7.4	--	--
31...	480	310	160	716	7.8	--	--
JAN.							
07...	280	160	92	412	7.6	--	--
28...	580	330	180	913	8.3	--	--
FEB.							
02...	628	340	210	1020	8.1	--	--
22...	154	80	42	230	7.6	--	--
MAR.							
16...	278	170	94	434	7.1	--	--
30...	378	250	130	599	8.1	--	--
APR.							
02...	412	260	130	632	7.8	--	--
29...	534	340	170	811	8.0	--	--
MAY							
04...	542	360	180	842	7.5	--	--
27...	316	190	110	461	7.6	--	--
JUNE							
08...	292	200	97	479	8.0	--	--
16...	--	--	--	--	--	23	3.2
24...	490	310	130	797	8.4	--	--
JULY							
07...	514	330	130	783	7.6	--	--
26...	232	130	64	355	7.1	--	--
AUG.							
02...	594	280	140	968	7.4	--	--
30...	704	360	190	1110	8.4	--	--
SEP.							
02...	652	360	180	1100	8.2	--	--
30...	506	300	150	828	7.9	--	--

04199900 EAST BRANCH BLACK RIVER AT GRAFTON, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	752	727	646	474	681	672	1010	980	---	---
2	---	---	763	583	499	476	698	681	1030	1010	---	---
3	---	---	608	397	544	499	707	698	1020	985	---	---
4	---	---	485	442	568	427	700	490	987	961	---	---
5	---	---	526	484	500	465	510	422	961	279	---	---
6	---	---	575	526	473	460	438	386	386	309	---	---
7	---	---	617	575	515	473	406	393	338	320	---	---
8	---	---	642	617	551	515	437	406	381	338	---	---
9	---	---	667	642	567	552	502	438	418	381	---	---
10	---	---	692	667	591	567	603	502	472	418	---	---
11	---	---	710	687	612	590	620	594	506	472	---	---
12	---	---	732	710	615	366	633	610	548	506	---	---
13	---	---	752	732	368	332	666	633	547	540	---	---
14	---	---	759	729	396	333	728	658	581	540	---	---
15	---	---	728	476	461	396	739	718	600	581	---	---
16	---	---	608	479	505	461	747	721	613	599	---	---
17	---	---	528	506	506	474	800	739	633	611	---	---
18	---	---	545	515	517	472	816	787	611	459	---	---
19	---	---	583	545	520	507	800	792	459	340	---	---
20	---	---	617	583	533	505	794	783	---	---	---	---
21	---	---	642	618	552	533	787	748	---	---	---	---
22	---	---	669	642	550	543	784	730	---	---	---	---
23	---	---	688	669	544	528	784	722	---	---	---	---
24	---	---	714	683	556	515	792	763	---	---	---	---
25	---	---	723	708	517	500	835	771	---	---	---	---
26	780	758	714	696	537	517	872	798	---	---	---	---
27	828	780	699	688	556	537	897	872	---	---	---	---
28	837	826	692	681	591	555	928	897	---	---	---	---
29	834	815	692	586	624	591	933	926	---	---	---	---
30	815	759	616	461	647	624	954	912	---	---	---	---
31	759	750	---	---	672	647	982	954	---	---	---	---
MONTH	---	---	763	397	672	332	982	386	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	817	809	---	---	935	771	984	769	1540	1130
2	---	---	816	797	---	---	810	748	1100	885	1340	1130
3	---	---	821	813	---	---	856	745	1120	922	1330	1120
4	---	---	831	805	---	---	887	748	1430	979	1280	1110
5	745	661	834	828	---	---	865	758	1160	914	1320	1090
6	681	652	829	674	---	---	875	763	1100	895	1390	1110
7	681	643	763	540	---	---	868	758	1120	872	1420	1080
8	643	634	750	587	---	---	884	774	1060	855	1520	1070
9	642	635	597	558	---	---	802	763	1200	775	1630	1090
10	658	642	600	554	---	---	843	765	1020	860	1360	1080
11	656	645	565	555	---	---	787	702	1340	904	1350	1180
12	671	654	585	568	---	---	761	715	1230	898	1630	1150
13	680	669	601	585	---	---	753	720	1360	980	1280	1180
14	716	663	645	601	---	---	813	735	1230	987	1190	966
15	722	705	699	645	---	---	803	723	1240	1050	998	988
16	769	704	712	691	700	674	788	706	1240	965	1000	982
17	786	769	700	683	774	700	838	709	1360	950	988	956
18	799	784	684	670	722	652	889	726	1290	96[illegible]	960	947
19	795	778	680	675	743	700	768	720	1520	1080	[illegible]	934
20	778	743	---	---	---	---	772	729	1310	1090	94[illegible]	908
21	761	746	---	---	---	---	884	733	1290	1110	916	900
22	772	757	---	---	787	769	887	746	1280	1060	923	913
23	783	740	---	---	797	776	949	783	1270	1170	923	913
24	792	771	---	---	856	787	889	820	1500	1040	918	892
25	789	782	---	---	859	789	816	256	1380	1100	892	861
26	794	783	---	---	825	771	667	370	1390	1020	861	830
27	803	786	---	---	805	758	875	414	1390	1140	843	833
28	797	791	---	---	828	761	710	541	1350	1150	841	815
29	807	792	---	---	878	769	771	630	1310	1110	851	817
30	812	795	---	---	841	779	819	718	1350	1010	841	812
31	---	---	---	---	---	---	807	701	1350	1080	---	---
MONTH	812	634	---	---	---	---	949	256	1520	769	1630	812

04199900 EAST BRANCH BLACK RIVER AT GRAFTON, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	10.5	10.0	7.0	5.0	0.0	0.0	0.0	0.0	---	---
2	---	---	10.0	9.5	7.5	6.5	0.0	0.0	0.0	0.0	---	---
3	---	---	9.5	8.5	6.5	6.0	0.0	0.0	0.0	0.0	---	---
4	---	---	8.5	8.0	6.5	5.5	1.0	0.0	0.0	0.0	---	---
5	---	---	8.0	7.0	6.0	4.5	0.0	0.0	0.5	0.0	---	---
6	---	---	7.0	6.5	4.5	2.5	0.0	0.0	0.0	0.0	---	---
7	---	---	7.5	6.5	2.5	1.0	0.0	0.0	0.0	0.0	---	---
8	---	---	7.0	6.5	1.5	0.5	0.5	0.0	0.0	0.0	---	---
9	---	---	8.0	6.5	3.0	1.5	0.5	0.0	0.0	0.0	---	---
10	---	---	10.0	7.5	3.0	2.5	0.5	0.0	0.0	0.0	---	---
11	---	---	9.5	8.5	3.5	3.0	0.5	0.0	0.0	0.0	---	---
12	---	---	9.5	9.0	3.5	3.5	0.5	0.0	0.0	0.0	---	---
13	---	---	9.5	8.5	3.5	2.5	0.0	0.0	0.0	0.0	---	---
14	---	---	8.5	7.5	2.5	2.0	0.5	0.0	0.0	0.0	---	---
15	---	---	7.5	5.0	2.0	1.5	0.0	0.0	0.0	0.0	---	---
16	---	---	5.0	4.0	1.5	1.0	0.0	0.0	0.0	0.0	---	---
17	---	---	4.0	3.5	1.5	1.5	0.0	0.0	0.0	0.0	---	---
18	---	---	3.5	3.0	1.5	1.5	0.0	0.0	0.0	0.0	---	---
19	---	---	4.0	3.0	2.5	1.5	0.0	0.0	0.0	0.0	---	---
20	---	---	5.5	4.0	2.5	2.0	0.0	0.0	---	---	---	---
21	---	---	5.0	4.0	2.0	1.5	0.5	0.0	---	---	---	---
22	---	---	5.0	4.0	2.0	1.5	0.5	0.0	---	---	---	---
23	---	---	3.5	0.5	2.5	1.5	0.5	0.0	---	---	---	---
24	---	---	0.5	0.0	2.0	1.0	0.5	0.0	---	---	---	---
25	---	---	0.0	0.0	1.0	0.0	0.5	0.0	---	---	---	---
26	11.0	10.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	---
27	10.5	9.5	1.5	0.0	0.0	0.0	0.0	0.0	---	---	---	---
28	10.5	9.5	3.0	1.5	0.0	0.0	0.0	0.0	---	---	---	---
29	10.0	10.0	4.5	3.0	0.0	0.0	0.0	0.0	---	---	---	---
30	10.5	10.0	5.5	4.5	0.0	0.0	0.0	0.0	---	---	---	---
31	11.0	10.0	---	---	0.0	0.0	0.0	0.0	---	---	---	---
MONTH	---	---	10.5	0.0	7.5	0.0	1.0	0.0	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	28.5	25.5	23.0	19.0	24.5	21.5
2	---	---	---	---	---	---	28.0	25.0	24.0	20.0	26.0	20.5
3	---	---	---	---	---	---	26.0	22.5	26.0	22.0	26.5	23.5
4	---	---	---	---	---	---	25.0	22.5	25.5	22.0	27.0	22.5
5	---	---	---	---	---	---	27.0	23.5	24.0	18.5	26.0	21.5
6	---	---	---	---	---	---	27.5	24.0	24.5	19.5	26.5	21.0
7	---	---	---	---	---	---	26.5	23.5	25.0	20.0	25.5	20.0
8	---	---	---	---	---	---	25.0	24.0	25.5	21.0	28.5	21.5
9	---	---	---	---	---	---	26.0	24.5	27.0	22.0	27.5	21.5
10	---	---	---	---	---	---	26.0	24.5	27.0	23.0	25.0	19.0
11	---	---	---	---	---	---	25.5	23.0	27.5	23.5	25.0	22.0
12	---	---	---	---	---	---	24.5	22.0	26.0	22.0	24.5	21.0
13	---	---	---	---	---	---	23.5	22.5	26.5	21.0	24.0	21.0
14	---	---	---	---	---	---	26.5	22.0	27.0	22.0	23.0	19.5
15	---	---	---	---	---	---	24.0	21.5	27.5	24.0	21.5	20.5
16	---	---	---	---	24.5	23.5	25.0	21.5	27.0	22.0	20.5	19.5
17	---	---	---	---	24.5	21.0	25.5	22.5	26.0	19.5	20.0	18.5
18	---	---	---	---	25.0	22.0	23.5	17.5	29.0	20.5	19.0	17.5
19	---	---	---	---	25.0	24.0	22.5	21.5	29.0	21.5	18.5	18.5
20	---	---	---	---	---	---	22.0	20.5	27.5	22.5	19.0	18.5
21	---	---	---	---	---	---	24.5	20.0	25.0	20.5	18.0	17.0
22	---	---	---	---	24.0	22.5	22.5	21.0	26.0	21.0	17.5	16.0
23	---	---	---	---	23.5	21.0	26.5	22.5	26.0	22.0	17.5	16.5
24	---	---	---	---	24.5	22.5	27.0	23.5	27.0	21.0	17.5	16.0
25	---	---	---	---	24.5	23.5	25.0	21.5	26.5	22.0	16.5	14.5
26	---	---	---	---	26.5	23.5	26.0	20.0	26.0	19.5	15.5	15.5
27	---	---	---	---	25.0	23.5	25.5	20.5	25.0	21.0	16.0	15.5
28	---	---	---	---	26.0	24.0	26.0	20.0	24.0	20.0	17.5	16.0
29	---	---	---	---	30.5	26.0	27.5	21.5	23.0	18.5	18.0	17.0
30	---	---	---	---	32.0	26.5	25.0	23.0	23.0	17.0	19.0	18.0
31	---	---	---	---	---	---	24.0	19.5	24.0	20.0	---	---
MONTH	---	---	---	---	---	---	28.5	17.5	29.0	17.0	28.5	14.5

04200400 WEST BRANCH BLACK RIVER NEAR ELYRIA, OHIO

LOCATION.--Lat 41°20'10", long 82°07'15", Lorain County, on right abutment of private dam, 200 ft upstream from bridge on U.S. Highway 20, 4 miles upstream from confluence with East Branch, and 1.8 miles south from center of Elyria.

DRAINAGE AREA.--170 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1969 to September 1971.
Water temperatures: March 1969 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 922 micromhos Jan. 31; minimum, 168 micromhos Feb. 23.
Water temperatures: Maximum, 28.5°C June 26; minimum, freezing point Dec. 25 to Jan. 21.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)
OCT.							
14...	1230	--	--	--	--	--	--
17...	1530	120	0	100	19	.2	13
27...	1700	162	0	150	26	.3	9.0
NOV.							
01...	1500	169	3	160	33	.3	10
17...	1650	110	0	100	17	.2	13
DEC.							
09...	1600	149	0	140	23	.6	9.0
16...	1400	122	0	110	17	.6	10
JAN.							
07...	1500	98	0	99	19	.4	12
31...	1330	246	0	200	73	.5	16
FEB.							
12...	1600	119	0	100	36	.5	11
21...	1800	41	0	35	19	.4	12
MAR.							
07...	1500	107	0	100	23	.3	10
30...	1700	162	0	130	29	.5	7.0
APR.							
04...	1500	179	0	140	32	.3	4.1
27...	1600	220	0	170	41	.4	4.2
MAY							
01...	1100	230	0	180	39	.3	5.4
25...	1600	131	0	90	25	.2	14
JUNE							
01...	1300	190	0	130	26	.2	11
09...	1700	125	0	85	36	.3	24
16...	1310	--	--	--	--	--	--
JULY							
15...	1330	136	0	140	40	.4	20
25...	1405	158	0	98	76	.4	8.1
AUG.							
07...	1700	170	0	96	44	.4	5.9
29...	1630	190	4	99	51	.4	4.1
SEP.							
17...	1500	212	0	120	63	.7	4.8
28...	1520	156	0	99	44	.5	15

04200400 WEST BRANCH BLACK RIVER NEAR ELYRIA, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-71): Maximum, 922 micromhos Jan. 31, 1971; minimum, 168 micromhos Feb. 23, 1971.
Water temperatures (1969-71): Maximum, 28.5°C June 26, 1971; minimum, freezing point Dec. 25, 1970 to Jan. 21, 1971.

REMARKS.--Continuous water-quality recorder operated since March 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
14...	--	--	--	--	--	13	5.3
17...	340	210	112	465	7.1	--	--
27...	426	280	147	626	8.1	--	--
NOV.							
01...	458	290	146	673	8.3	--	--
17...	316	200	110	453	7.8	--	--
DEC.							
09...	352	250	130	558	8.2	--	--
16...	298	210	110	468	7.2	--	--
JAN.							
07...	286	190	110	433	7.1	--	--
31...	620	380	180	940	7.2	--	--
FEB.							
12...	330	200	100	515	7.8	--	--
21...	130	73	40	229	7.3	--	--
MAR.							
07...	284	190	100	458	8.1	--	--
30...	384	270	140	612	8.0	--	--
APR.							
04...	426	190	44	657	7.7	--	--
27...	506	350	170	776	8.0	--	--
MAY							
01...	506	350	160	789	7.5	--	--
25...	300	210	100	487	7.0	--	--
JUNE							
01...	408	290	130	628	8.2	--	--
09...	330	190	88	519	7.9	--	--
16...	--	--	--	--	--	120	.7
JULY							
15...	320	190	78	536	7.0	--	--
25...	400	220	90	698	6.8	--	--
AUG.							
07...	356	230	90	582	8.2	--	--
29...	400	250	88	645	8.4	--	--
SEP.							
17...	446	250	76	736	7.2	--	--
28...	370	210	82	601	6.9	--	--

04200400 WEST BRANCH BLACK RIVER NEAR ELYRIA, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	536	525	685	650	485	464	701	558	---	---	442	403
2	533	518	677	641	491	469	714	701	---	---	468	438
3	530	525	646	419	511	491	730	714	---	---	488	462
4	531	524	446	412	509	468	734	598	---	---	497	480
5	531	522	475	436	558	499	598	451	485	312	517	492
6	536	515	527	475	499	446	489	434	353	322	534	510
7	537	522	552	527	470	457	436	431	333	323	523	455
8	572	534	565	551	524	470	472	435	366	328	471	441
9	605	572	580	564	563	524	504	472	394	366	475	446
10	612	600	601	577	587	560	543	504	441	394	492	475
11	610	589	613	596	591	581	567	543	475	441	540	492
12	621	591	627	609	588	395	596	566	524	475	552	540
13	610	561	643	624	400	342	624	595	639	508	544	474
14	626	514	650	640	410	344	652	624	671	542	483	452
15	547	393	647	489	455	406	683	650	542	526	464	442
16	438	398	495	456	486	450	738	683	542	516	475	461
17	472	438	456	451	520	486	758	738	546	503	503	471
18	493	466	484	458	520	501	771	758	535	341	549	501
19	510	488	508	484	526	505	779	771	342	213	570	544
20	527	503	538	508	532	523	784	773	213	198	576	555
21	549	523	565	538	538	530	794	771	250	205	581	547
22	584	521	575	565	546	536	792	788	298	250	566	502
23	577	532	601	572	553	530	792	777	279	168	522	493
24	607	577	619	600	543	526	781	762	310	204	566	503
25	622	605	621	614	541	520	766	753	375	310	633	566
26	633	621	621	616	538	520	781	760	395	374	636	546
27	638	627	617	608	547	535	809	781	394	380	558	504
28	640	629	611	599	570	547	853	809	409	377	524	473
29	645	634	607	575	606	570	862	851	---	---	574	522
30	647	636	603	445	634	606	891	860	---	---	637	571
31	657	641	---	---	658	634	922	885	---	---	658	633
MONTH	657	393	685	412	658	342	922	431	671	168	658	403

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	673	652	804	782	608	583	704	613	654	616	681	659
2	670	641	823	792	650	608	---	---	639	594	704	669
3	674	647	824	785	654	618	---	---	621	600	696	678
4	669	646	806	767	681	630	---	---	627	607	709	685
5	697	669	805	770	700	663	---	---	619	610	724	685
6	707	683	803	734	709	672	---	---	614	607	726	687
7	712	685	734	592	716	669	---	---	614	603	717	683
8	712	685	642	588	672	601	---	---	612	598	736	685
9	738	700	642	589	658	530	---	---	608	578	730	698
10	706	663	609	577	545	499	---	---	614	603	730	700
11	724	690	603	589	558	515	---	---	614	601	722	706
12	742	684	601	591	621	533	---	---	---	---	715	704
13	725	678	614	585	724	542	---	---	---	---	715	702
14	728	710	640	585	690	407	---	---	---	---	734	709
15	771	715	658	607	528	457	564	521	---	---	761	727
16	731	669	663	625	566	518	541	499	641	610	797	732
17	768	681	668	617	670	554	530	496	652	618	776	736
18	763	729	766	656	648	599	513	495	643	609	805	743
19	766	722	765	669	672	604	515	507	630	596	780	739
20	783	725	729	690	646	602	544	505	629	601	770	733
21	781	742	733	683	797	464	567	544	629	616	776	742
22	779	758	735	711	679	582	608	556	634	623	774	734
23	786	742	746	705	637	599	658	594	638	621	760	730
24	775	762	750	724	644	619	649	591	661	619	767	726
25	772	738	731	424	674	632	672	591	678	638	735	716
26	776	748	490	429	763	530	698	600	678	638	753	717
27	790	774	498	448	641	604	698	654	676	636	765	548
28	808	761	575	501	650	613	689	649	656	632	726	627
29	816	775	578	531	633	566	692	656	658	645	683	589
30	799	773	586	561	748	600	670	658	659	625	672	614
31	---	---	595	567	---	---	667	632	674	649	---	---
MONTH	816	641	824	424	797	407	---	---	678	578	805	548
YEAR	922	168										

04200400 WEST BRANCH BLACK RIVER NEAR ELYRIA, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	15.5	13.5	12.5	8.0	6.5	0.0	0.0	---	---	5.0	4.5
2	16.5	15.0	12.5	12.5	8.5	8.0	0.0	0.0	---	---	5.0	4.5
3	16.0	15.0	12.5	11.0	8.0	7.5	0.5	0.0	---	---	4.5	2.5
4	15.0	14.0	11.0	10.0	7.5	6.0	0.5	0.0	---	---	2.5	1.5
5	16.5	14.0	10.0	9.0	6.0	4.5	0.0	0.0	---	---	3.0	1.5
6	19.0	15.0	9.0	8.5	4.5	2.5	0.0	0.0	---	---	4.0	2.5
7	17.0	15.0	9.5	9.0	2.5	1.0	0.0	0.0	---	---	3.5	2.5
8	18.0	15.0	9.0	8.5	1.0	0.5	0.0	0.0	---	---	2.5	1.0
9	18.5	16.5	9.5	8.5	2.5	1.0	0.0	0.0	---	---	2.0	1.0
10	18.0	16.5	10.0	9.5	3.5	2.5	0.0	0.0	---	---	1.5	1.5
11	16.5	15.5	11.0	10.0	4.0	3.5	0.0	0.0	---	---	2.0	1.0
12	16.5	16.0	11.0	11.0	4.5	3.5	0.0	0.0	---	---	3.0	1.5
13	17.5	16.0	11.0	10.5	4.0	3.5	0.0	0.0	---	---	3.5	3.0
14	18.5	17.0	10.5	10.0	3.5	2.5	0.0	0.0	---	---	5.5	3.0
15	18.0	15.5	9.5	6.5	2.5	1.5	0.0	0.0	---	---	7.5	5.0
16	15.5	13.0	6.5	5.5	1.5	1.5	0.0	0.0	---	---	7.0	5.5
17	13.0	11.5	5.5	4.5	2.5	1.5	0.0	0.0	---	---	5.0	3.5
18	11.5	11.0	5.0	4.5	2.0	2.0	0.0	0.0	---	---	3.5	2.5
19	11.5	10.5	5.5	5.0	3.0	2.0	0.0	0.0	---	---	3.5	2.5
20	11.5	11.0	6.5	5.5	3.0	3.0	0.0	0.0	---	---	3.0	2.0
21	12.0	11.5	6.5	6.0	3.0	2.0	0.0	0.0	---	---	3.0	1.5
22	13.5	12.0	6.5	5.5	2.0	2.0	---	---	---	---	4.5	2.5
23	13.0	13.0	5.5	2.5	3.0	2.0	---	---	---	---	3.5	2.0
24	13.0	12.5	2.5	0.5	2.5	0.5	---	---	---	---	2.5	1.0
25	13.5	12.0	0.5	0.5	0.5	0.0	---	---	3.5	2.5	3.0	1.5
26	13.0	12.5	0.5	0.5	0.0	0.0	---	---	4.0	2.5	3.0	1.5
27	13.0	12.0	1.0	0.5	0.0	0.0	---	---	5.5	4.0	3.5	2.0
28	12.5	12.0	3.0	1.0	0.0	0.0	---	---	5.0	4.5	6.0	3.5
29	12.5	12.0	6.0	2.5	0.0	0.0	---	---	---	---	6.0	5.0
30	13.0	12.5	7.0	6.0	0.0	0.0	---	---	---	---	6.0	4.0
31	13.5	12.5	---	---	0.0	0.0	---	---	---	---	6.0	4.0
MONTH	19.0	10.5	13.5	0.5	8.5	0.0	---	---	---	---	7.5	1.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	5.5	12.5	11.0	20.0	17.5	25.0	22.5	23.5	19.5	24.0	22.0
2	7.5	6.5	12.0	11.0	21.5	18.0	---	---	23.5	20.0	24.5	23.0
3	7.0	5.0	12.5	11.0	22.5	19.0	---	---	23.0	21.0	25.5	23.5
4	6.0	4.5	14.5	11.5	24.0	20.0	---	---	22.5	20.0	27.0	24.0
5	5.5	5.0	15.0	12.5	24.5	22.0	---	---	21.0	19.5	27.5	24.0
6	6.0	4.5	15.0	13.5	25.0	22.0	---	---	20.5	19.0	26.5	24.0
7	7.5	4.5	14.5	13.5	25.5	23.0	---	---	21.5	19.5	27.0	24.5
8	8.5	5.0	16.5	14.0	23.0	20.5	---	---	22.5	20.0	26.5	24.5
9	9.5	6.5	16.5	14.0	22.0	19.0	---	---	25.5	20.5	25.5	24.0
10	11.0	8.0	18.5	15.0	19.5	17.5	---	---	25.0	22.5	24.5	23.5
11	12.0	8.5	18.0	16.5	21.5	16.5	---	---	25.5	22.5	24.5	23.0
12	13.0	9.5	17.0	16.0	22.0	18.5	---	---	---	---	24.0	23.0
13	13.0	9.5	18.0	15.0	22.5	19.0	---	---	---	---	23.5	21.0
14	13.0	10.0	19.0	14.0	22.0	20.0	---	---	---	---	23.0	21.5
15	12.0	10.5	18.0	14.5	21.5	20.0	23.5	19.5	---	---	23.0	21.5
16	13.5	10.0	19.0	16.0	21.0	19.5	23.5	19.0	---	---	22.0	20.5
17	12.5	11.0	22.5	17.0	23.5	20.0	22.0	20.5	---	---	20.5	18.5
18	15.0	11.0	23.5	18.5	22.0	20.0	23.0	20.0	24.0	20.5	20.0	19.0
19	15.5	12.0	24.5	20.5	25.0	21.0	21.5	18.5	26.0	23.0	20.0	18.5
20	16.5	13.0	23.5	20.5	27.0	22.5	21.0	18.5	26.0	23.5	19.5	18.5
21	16.0	13.0	22.5	20.0	23.5	21.0	21.0	19.0	25.0	24.0	18.5	17.5
22	13.5	12.5	20.5	19.0	23.0	20.0	24.0	19.5	26.5	25.0	18.0	17.5
23	15.0	11.5	22.5	18.0	22.0	20.0	24.5	21.5	25.0	23.0	19.0	16.5
24	12.5	10.5	20.5	18.5	23.5	21.5	23.5	20.5	24.5	21.5	18.0	17.0
25	12.0	10.0	18.5	15.5	24.5	22.5	22.5	19.0	24.5	22.0	17.5	16.0
26	11.5	10.5	15.5	13.5	28.5	20.5	23.0	21.0	25.0	22.5	17.0	16.0
27	11.0	10.0	13.5	12.5	25.0	21.5	22.5	19.5	24.5	22.5	17.5	16.0
28	12.5	10.0	16.0	12.5	27.0	23.5	22.5	18.5	24.5	21.5	21.0	16.5
29	11.0	10.0	17.5	14.0	27.0	23.0	22.5	20.5	24.0	22.0	20.5	17.5
30	12.0	10.0	19.0	15.0	27.0	24.0	22.0	19.5	25.5	21.5	20.5	18.0
31	---	---	20.0	16.5	---	---	22.0	18.5	24.5	22.0	---	---
MONTH	16.5	4.5	24.5	11.0	28.5	16.5	---	---	26.5	19.0	27.5	16.0
YEAR	28.5	0.0										

04200550 BLACK RIVER BELOW ELYRIA, OHIO

LOCATION.--Lat 41°24'42", long 82°05'45", Lorain County, at Ford Road bridge on north edge of Elyria, 0.7 mile downstream from Elyria sewage disposal plant, and 5.2 miles downstream from gaging station at Elyria.

DRAINAGE AREA.--412 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1966 to September 1971.
Water temperatures: January 1966 to September 1971.

EXTREMES.--Period of record:
Specific conductance (January to September 1966, 1967-68, 1969-70): Maximum, 1,500 micromhos on many days during April and May, July to September 1966, Aug. 22, 23, 1970; minimum, 220 micromhos Feb. 11, 1966.
Dissolved oxygen (January to September 1966): Maximum, 15.0 mg/l on several days during April to June 1966; minimum, 0.0 mg/l June 3, 5, 6, July 3, 4, 1966.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.							
11...	1635	13	224	0	110	110	1.9
14...	0900	758	--	--	--	--	--
18...	1749	229	121	0	110	41	.5
NOV.							
08...	1717	189	142	0	130	50	.3
22...	1705	235	110	0	120	31	.2
DEC.							
13...	1646	4010	74	0	62	16	.3
29...	1232	138	128	0	130	59	.4
JAN.							
10...	1241	285	87	0	100	41	.3
24...	1801	40	134	0	150	130	.5
FEB.							
14...	1731	229	107	0	85	63	.3
21...	1711	3350	42	0	30	13	.2
MAR.							
16...	1205	1290	93	0	95	30	.3
21...	1355	747	114	0	120	37	.3
APR.							
12...	1805	59	150	0	150	54	.5
25...	1815	44	136	0	180	94	.5
MAY							
02...	1702	31	130	0	190	110	.6
30...	1040	138	123	0	100	40	.2
JUNE							
05...	0750	101	157	0	130	59	.3
27...	1359	22	91	0	130	130	.6
JULY							
04...	1936	13	120	0	140	100	.6
11...	1505	225	124	0	99	86	.4
AUG.							
01...	1924	14	116	0	130	93	.4
19...	1055	6.4	128	0	160	190	.5
SEP.							
14...	1300	27	128	0	160	250	.6
19...	1415	23	72	0	160	100	.6

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BARIUM (BA) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
OCT.							
14...	92	10	0	2	3	0	20
JUNE							
16...	15	0	--	--	--	--	--

04200550 BLACK RIVER BELOW ELYRIA, OHIO--Continued

EXTREMES.--Period of record--Continued
Water temperatures (1966-68, 1969-70): Maximum, 29.5°C Aug. 1, 1970; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since January 1966. Minimum recorded specific conductance value of 200 micromhos occurred May 8, 1967. Maximum recorded water temperature of 30.5°C occurred June 28, 1971. Specific conductance values listed as 1,500 micromhos represent values of 1,500 micromhos or greater, due to instrument limitations. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice a year to further define the quality of water. The quality of the water is affected by sewage disposal and industrial waste. Records of discharge are given for 04200500 Black River at Elyria, Ohio (drainage area 396 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
11...	72	13	488	240	56	977	6.9
14...	--	--	--	--	--	--	--
18...	18	.84	344	180	81	550	6.7
NOV.							
08...	9.4	1.2	382	250	130	654	7.0
22...	11	.50	300	200	110	508	8.0
DEC.							
13...	12	.43	204	140	80	341	7.7
29...	19	2.0	410	250	140	701	6.9
JAN.							
10...	79	1.7	372	210	140	580	6.5
24...	79	3.5	686	310	200	1140	6.7
FEB.							
14...	22	1.0	398	200	110	626	7.1
21...	9.0	.40	108	68	34	200	7.3
MAR.							
16...	14	.28	300	180	100	462	6.9
21...	11	.36	354	220	130	552	7.8
APR.							
12...	17	2.0	450	280	160	734	8.1
25...	36	3.4	586	310	200	948	6.8
MAY							
02...	52	8.2	640	320	210	1030	7.6
30...	22	2.7	372	230	130	582	6.8
JUNE							
05...	13	2.5	398	260	130	715	8.0
27...	50	7.5	554	210	140	956	7.5
JULY							
04...	38	7.4	506	230	130	885	7.9
11...	12	3.0	400	190	88	734	6.9
AUG.							
01...	46	6.5	494	220	120	880	7.0
19...	46	10	680	220	120	1200	6.6
SEP.							
14...	98	5.4	728	220	120	1400	6.6
19...	69	15	538	220	160	884	7.9

DATE	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.						
14...	0	1.7	350	0	6	110
JUNE						
16...	--	.5	--	--	--	--

04200550 BLACK RIVER BELOW ELYRIA, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	760	720	---	---	420	380
2	---	---	---	---	---	---	800	740	---	---	480	420
3	---	---	---	---	---	---	840	800	---	---	520	460
4	---	---	---	---	---	---	820	660	---	---	620	520
5	---	---	---	---	---	---	660	490	---	---	620	560
6	---	---	---	---	---	---	570	500	---	---	610	570
7	---	---	---	---	---	---	560	510	---	---	580	420
8	---	---	---	---	---	---	---	---	---	---	500	440
9	---	---	---	---	---	---	---	---	---	---	600	470
10	---	---	---	---	---	---	---	---	---	---	590	480
11	---	---	---	---	---	---	---	---	---	---	580	520
12	---	---	---	---	---	---	---	---	---	---	580	520
13	---	---	---	---	---	---	---	---	---	---	560	440
14	---	---	---	---	---	---	---	---	---	---	460	440
15	---	---	---	---	---	---	---	---	---	---	460	430
16	---	---	---	---	---	---	---	---	---	---	460	440
17	---	---	---	---	540	500	---	---	---	---	480	460
18	---	---	---	---	500	480	---	---	---	---	500	460
19	---	---	---	---	530	500	---	---	---	---	540	480
20	---	---	---	---	540	530	---	---	---	---	580	520
21	---	---	---	---	570	530	---	---	---	---	520	500
22	---	---	---	---	610	570	---	---	---	---	550	520
23	---	---	---	---	610	560	---	---	---	---	720	500
24	---	---	---	---	570	560	---	---	---	---	800	560
25	---	---	---	---	580	570	---	---	350	320	720	630
26	---	---	---	---	640	580	---	---	360	340	710	660
27	---	---	---	---	640	600	---	---	380	360	---	---
28	---	---	---	---	680	640	---	---	380	360	---	---
29	---	---	---	---	720	680	---	---	---	---	600	470
30	---	---	---	---	800	720	---	---	---	---	720	600
31	---	---	---	---	810	740	---	---	---	---	840	710
MONTH	---	---	---	---	---	---	---	---	---	---	840	380

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	950	810	1140	1080	740	630	850	620	920	860	1280	1150
2	930	820	1100	1000	830	720	910	810	1030	850	1240	1140
3	---	---	1040	990	880	810	900	830	1190	970	1260	1180
4	---	---	1070	970	940	860	900	870	1080	940	1320	1140
5	---	---	1170	1030	900	800	960	860	1110	1020	1230	1130
6	---	---	1180	740	800	710	1040	930	1140	1040	1180	910
7	---	---	840	640	860	660	1220	1010	1220	1040	1360	910
8	---	---	680	560	760	660	1200	1070	1040	970	1310	1130
9	---	---	720	630	740	650	1190	1000	1200	910	1390	1150
10	---	---	630	550	800	700	1250	1160	1180	1110	1270	1130
11	---	---	680	600	900	780	1160	600	1140	940	1300	1140
12	---	---	740	620	840	780	600	460	1310	1100	1200	1120
13	900	800	760	670	850	580	740	520	1270	1140	1500	860
14	940	830	800	680	740	580	810	670	1270	1140	1500	1380
15	930	860	740	670	780	700	1050	750	1170	990	1500	1140
16	950	870	740	700	800	750	1040	730	1500	990	1150	990
17	920	770	---	---	770	670	1030	830	1500	1190	1160	1030
18	770	740	---	---	780	700	830	750	1500	1210	1060	980
19	840	740	940	860	810	720	830	670	1500	1150	1000	850
20	950	840	870	820	890	730	780	600	1330	1200	1080	640
21	1070	910	930	810	910	630	820	660	1380	850	1130	910
22	1090	970	910	840	830	670	830	670	1320	890	1070	990
23	1070	980	880	800	990	780	900	700	1300	1000	[illegible]	920
24	1100	1020	940	500	1000	840	890	680	1440	1300	1070	980
25	1100	940	600	390	1020	940	720	610	1450	1260	1060	990
26	940	870	490	380	1010	650	770	630	1350	1250	1000	910
27	1010	810	500	420	980	950	750	690	1400	1250	1010	690
28	1080	920	530	480	970	850	910	690	1320	1210	---	---
29	1130	1020	580	520	860	570	1010	760	1270	1140	1010	980
30	1160	1040	630	560	920	570	1060	830	1280	1080	1080	980
31	---	---	660	620	---	---	1030	900	1450	1230	---	---
MONTH	---	---	1180	380	1020	570	1250	460	1500	850	1500	640

04200550 BLACK RIVER BELOW ELYRIA, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	13.4	12.7
23	---	---	---	---	---	---	---	---	---	---	12.7	12.3
24	---	---	---	---	---	---	---	---	---	---	12.8	12.2
25	---	---	---	---	---	---	---	---	---	---	12.5	12.2
26	---	---	---	---	---	---	---	---	---	---	12.4	11.9
27	---	---	---	---	---	---	---	---	---	---	12.2	11.9
28	---	---	---	---	---	---	---	---	---	---	12.0	11.6
29	---	---	---	---	---	---	---	---	---	---	11.8	11.5
30	---	---	---	---	---	---	---	---	---	---	11.8	11.2
31	---	---	---	---	---	---	---	---	---	---	11.6	10.9
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.1	10.4	10.4	5.0	---	---	3.1	2.0	3.2	2.2	1.2	0.8
2	11.2	10.5	10.4	5.4	---	---	2.3	1.5	3.0	2.2	0.9	0.8
3	---	---	10.4	5.6	---	---	3.7	1.5	2.2	1.4	1.4	0.9
4	---	---	10.4	5.9	---	---	3.6	2.3	1.7	1.3	1.6	0.9
5	---	---	10.4	8.2	---	---	4.1	2.5	2.0	1.3	1.5	0.9
6	---	---	10.5	7.0	---	---	4.2	2.4	1.7	1.0	1.4	0.8
7	---	---	11.3	10.1	---	---	3.3	2.3	2.5	1.3	1.5	0.8
8	---	---	10.8	9.8	---	---	2.5	1.9	2.7	1.6	0.9	0.8
9	---	---	11.0	9.6	---	---	2.9	1.7	2.5	1.5	0.9	0.8
10	---	---	11.2	9.5	---	---	2.9	1.8	2.1	1.2	0.9	0.8
11	---	---	10.8	8.2	---	---	3.1	2.0	2.2	0.9	1.3	0.8
12	---	---	8.7	6.8	---	---	3.5	3.1	1.4	0.9	1.1	0.9
13	8.5	8.3	8.4	6.4	---	---	3.1	2.6	1.0	0.8	---	---
14	9.1	8.2	7.4	5.7	---	---	2.6	2.1	1.1	0.8	2.7	1.5
15	9.5	8.0	8.4	5.5	---	---	2.3	1.4	1.3	0.7	2.3	1.2
16	8.8	7.5	8.1	4.1	13.2	5.0	2.0	1.4	1.2	0.6	2.4	1.7
17	7.8	6.9	---	---	9.3	5.9	2.5	1.4	1.2	0.6	1.8	1.0
18	10.3	6.6	---	---	8.7	5.6	2.9	2.1	0.7	0.5	2.2	1.4
19	10.4	6.7	15.0	6.1	7.7	4.7	2.5	1.4	2.1	0.2	1.7	0.5
20	10.4	5.8	15.0	6.1	7.8	3.0	2.5	1.6	1.2	0.9	1.4	0.5
21	10.4	5.6	15.0	7.2	4.0	0.8	2.9	1.8	1.7	0.9	2.0	1.4
22	9.5	5.7	15.0	6.4	5.2	3.1	2.5	1.5	2.1	0.9	2.3	0.9
23	10.4	5.9	15.0	6.8	3.6	2.3	1.6	1.3	1.7	0.8	1.6	0.6
24	10.0	5.4	11.4	5.6	3.0	1.9	2.2	1.4	1.1	0.8	1.1	0.5
25	10.4	5.8	---	---	1.9	1.3	2.9	1.7	0.9	0.8	0.6	0.5
26	10.4	6.6	---	---	3.0	1.2	3.2	2.5	0.9	0.8	1.2	0.5
27	10.4	7.1	---	---	3.2	2.2	3.0	2.3	1.8	0.8	0.8	0.5
28	10.4	6.0	---	---	3.4	1.9	2.4	2.1	1.6	0.8	---	---
29	10.4	5.3	---	---	2.6	1.7	2.4	1.5	1.9	0.9	4.9	3.6
30	10.4	4.9	---	---	3.0	1.8	2.0	1.6	1.8	0.7	4.0	2.9
31	---	---	---	---	---	---	2.6	1.5	1.7	0.8	---	---
MONTH	---	---	---	---	---	---	4.2	1.3	3.2	0.2	4.9	0.5

04200550 BLACK RIVER BELOW ELYRIA, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	1.0	0.0	---	---	3.5	2.0
2	---	---	---	---	---	---	1.5	0.0	---	---	3.5	2.0
3	---	---	---	---	---	---	1.5	0.0	---	---	2.5	1.0
4	---	---	---	---	---	---	2.0	0.0	---	---	1.5	0.0
5	---	---	---	---	---	---	0.0	0.0	---	---	2.5	0.0
6	---	---	---	---	---	---	0.0	0.0	---	---	3.0	1.5
7	---	---	---	---	---	---	0.0	0.0	---	---	2.0	0.5
8	---	---	---	---	---	---	---	---	---	---	0.5	0.0
9	---	---	---	---	---	---	---	---	---	---	1.0	0.0
10	---	---	---	---	---	---	---	---	---	---	1.0	0.0
11	---	---	---	---	---	---	---	---	---	---	1.0	0.0
12	---	---	---	---	---	---	---	---	---	---	2.0	0.5
13	---	---	---	---	---	---	---	---	---	---	2.5	1.5
14	---	---	---	---	---	---	---	---	---	---	4.0	1.5
15	---	---	---	---	---	---	---	---	---	---	5.5	4.0
16	---	---	---	---	---	---	---	---	---	---	6.0	5.0
17	---	---	---	---	2.5	2.0	---	---	---	---	5.5	4.5
18	---	---	---	---	2.5	1.5	---	---	---	---	4.5	3.5
19	---	---	---	---	3.0	2.0	---	---	---	---	4.5	4.0
20	---	---	---	---	3.0	2.0	---	---	---	---	4.0	3.0
21	---	---	---	---	2.0	1.5	---	---	---	---	4.0	3.5
22	---	---	---	---	2.5	1.5	---	---	---	---	6.0	3.5
23	---	---	---	---	3.0	2.0	---	---	---	---	6.0	5.0
24	---	---	---	---	2.0	0.5	---	---	---	---	6.0	4.0
25	---	---	---	---	0.5	0.0	---	---	1.5	1.0	6.0	4.5
26	---	---	---	---	0.0	0.0	---	---	3.0	1.0	7.0	4.0
27	---	---	---	---	0.0	0.0	---	---	3.5	2.0	7.0	4.5
28	---	---	---	---	0.5	0.0	---	---	3.5	2.0	8.5	6.5
29	---	---	---	---	0.5	0.0	---	---	---	---	9.0	7.0
30	---	---	---	---	1.0	0.0	---	---	---	---	8.5	6.5
31	---	---	---	---	1.0	0.0	---	---	---	---	10.0	6.5
MONTH	---	---	---	---	---	---	---	---	---	---	10.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	8.5	13.5	11.0	20.5	17.5	29.0	25.5	25.5	20.0	25.5	24.5
2	11.0	9.0	14.0	11.0	21.0	17.0	28.5	24.5	25.5	21.0	25.5	23.5
3	---	---	16.5	10.5	23.5	18.5	29.0	23.0	24.5	23.5	26.0	24.0
4	---	---	17.0	10.0	25.0	19.0	27.5	23.5	24.0	22.5	26.5	24.5
5	---	---	16.5	13.5	25.0	21.5	27.0	25.5	26.0	20.0	28.0	24.5
6	---	---	16.0	13.5	25.0	22.0	29.0	25.0	26.0	21.0	27.0	24.5
7	---	---	15.0	13.5	25.0	22.0	28.5	24.0	26.5	21.5	27.0	24.5
8	---	---	16.0	13.5	---	---	27.0	24.5	27.0	22.5	28.0	24.5
9	---	---	17.0	14.0	---	---	29.5	25.5	26.0	23.0	27.0	24.5
10	---	---	18.5	15.5	---	---	27.0	25.0	27.0	24.5	26.5	22.5
11	---	---	19.0	16.5	---	---	26.0	23.0	26.5	24.0	26.0	24.0
12	---	---	19.0	18.0	---	---	26.0	21.5	26.0	21.5	25.5	23.5
13	13.0	12.0	19.0	16.0	---	---	26.0	23.0	26.0	21.0	24.5	22.0
14	13.5	11.0	20.0	15.0	---	---	27.0	23.0	25.5	22.0	24.0	21.0
15	13.0	10.5	19.5	15.0	---	---	25.5	22.0	24.5	23.0	23.0	20.5
16	14.5	10.5	19.5	16.5	25.5	21.5	27.0	22.0	24.5	21.0	21.5	19.5
17	14.0	12.0	---	---	26.5	21.0	27.0	23.5	25.5	19.5	20.5	19.0
18	15.5	11.5	---	---	26.0	21.5	26.5	21.5	26.5	21.0	22.5	17.5
19	16.0	11.0	24.5	22.0	26.0	22.5	24.5	22.5	26.0	22.5	21.0	19.5
20	17.0	12.0	24.0	20.0	27.0	23.0	26.0	21.0	26.5	24.5	21.0	19.0
21	15.0	13.0	23.5	19.0	24.5	22.0	26.0	21.5	27.0	24.5	22.0	18.5
22	14.0	11.5	22.5	18.0	24.5	20.0	27.5	21.5	27.5	23.5	21.0	16.5
23	16.0	10.0	22.5	16.5	25.5	20.0	26.5	23.5	26.0	23.5	21.5	18.0
24	14.0	11.0	21.0	18.0	26.0	22.5	25.5	23.0	25.5	21.0	21.0	17.5
25	15.0	10.0	18.5	16.5	27.0	23.5	25.5	21.5	25.5	22.0	18.5	15.0
26	13.5	11.0	16.5	14.5	25.5	22.5	24.5	23.5	26.0	23.5	19.0	17.5
27	12.0	8.5	15.0	13.5	27.5	22.0	24.5	21.5	26.0	23.0	19.5	18.0
28	13.0	10.5	16.5	13.0	30.5	25.0	25.5	21.0	24.5	23.0	---	---
29	13.0	[illegible]	18.0	14.0	28.5	23.5	26.0	22.0	26.0	21.5	25.0	23.0
30	15.5	11.0	20.0	14.5	28.0	25.5	24.0	21.5	26.0	22.0	26.0	21.5
31	---	---	20.5	16.5	---	---	25.0	20.0	26.0	23.5	---	---
MONTH	---	---	24.5	10.0	---	---	29.5	20.0	27.5	19.5	28.0	15.0

04201500 ROCKY RIVER NEAR BEREA, OHIO

LOCATION.--Lat 41°24'24", long 81°53'14", T.6 N., R.15 W., Cuyahoga County, on Cedar Point Road Bridge in Rocky River Reservation just downstream from confluence of East and West Branches, and 3 miles northwest of Berea. Sediment samples taken at bridge 2,400 ft downstream.

DRAINAGE AREA.--267 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1965-71 (partial-record station).
Sediment records: July 1969 to September 1971.

REMARKS.--Chemical analyses for this station on page 373. Flow affected by ice Dec. 27 to Jan. 3, Jan. 18 to Feb. 5, Feb. 10-17. Some regulation at low flow by small reservoirs on East Branch.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	64	34	5.9	--	--	--	--	--	--
2	47	31	3.9	--	--	--	278	24	18
3	44	29	3.4	--	--	--	--	--	--
4	37	26	2.6	946	108	276	--	--	--
5	29	24	1.9	413	73	81	--	--	--
6	54	21	3.1	255	42	29	--	--	--
7	36	20	1.9	178	20	9.6	--	--	--
8	27	20	1.5	133	12	4.3	159	9	3.9
9	22	20	1.2	109	10	2.9	146	9	3.5
10	18	20	.97	98	10	2.6	142	9	3.5
11	18	20	.97	87	10	2.3	--	--	--
12	--	--	--	81	10	2.2	--	--	--
13	--	--	--	77	10	2.1	--	--	--
14	--	--	--	--	--	--	--	--	--
15	1290	181	630	--	--	--	--	--	--
16	474	58	74	--	--	--	328	22	19
17	195	34	18	--	--	--	--	--	--
18	116	25	7.8	272	20	15	--	--	--
19	81	19	4.2	199	19	10	--	--	--
20	69	18	3.4	174	17	8.0	--	--	--
21	72	17	3.3	191	17	8.8	--	--	--
22	100	16	4.3	159	16	6.9	--	--	--
23	115	15	4.7	129	14	4.9	464	20	25
24	88	14	3.3	104	13	3.7	337	20	18
25	64	13	2.2	83	12	2.7	189	19	9.7
26	51	12	1.7	76	12	2.5	141	18	6.9
27	46	11	1.4	77	12	2.5	130	17	6.0
28	44	10	1.2	--	--	--	120	16	5.2
29	45	10	1.2	--	--	--	110	15	4.5
30	68	11	2.0	--	--	--	100	14	3.8
31	--	--	--	--	--	--	100	14	3.8
TOTAL	--	--	--	--	--	--	--	--	--

04201500 ROCKY RIVER NEAR BEREA, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	95	14	3.6	80	4	.86	--	--	--
2	90	14	3.4	80	4	.86	--	--	--
3	95	14	3.6	90	4	.97	--	--	--
4	1090	14	41	--	--	--	--	--	--
5	--	--	--	--	--	--	173	22	10
6	--	--	--	1400	328	1500	--	--	--
7	--	--	--	406	50	55	--	--	--
8	243	32	21	220	28	17	--	--	--
9	269	30	22	115	25	7.8	--	--	--
10	181	27	13	110	23	6.8	--	--	--
11	130	24	8.4	150	21	8.5	--	--	--
12	91	21	5.2	130	19	6.7	--	--	--
13	98	18	4.8	190	18	9.2	--	--	--
14	146	15	5.9	250	17	11	--	--	--
15	212	12	6.9	200	16	8.6	--	--	--
16	141	11	4.2	140	16	6.0	--	--	--
17	119	10	3.2	180	15	7.3	--	--	--
18	110	9	2.7	684	81	189	381	18	19
19	110	8	2.4	2800	469	3860	369	20	20
20	100	8	2.2	--	--	--	625	20	34
21	100	7	1.9	--	--	--	452	20	24
22	95	6	1.5	--	--	--	681	20	37
23	95	5	1.3	--	--	--	415	19	21
24	90	5	1.2	--	--	--	320	15	13
25	90	4	.97	--	--	--	335	11	9.9
26	85	4	.92	--	--	--	--	--	--
27	85	4	.92	--	--	--	--	--	--
28	85	4	.92	--	--	--	--	--	--
29	85	4	.92	--	--	--	--	--	--
30	85	4	.92	--	--	--	--	--	--
31	80	4	.86	--	--	--	--	--	--
TOTAL	--	--	--	--	--	--	--	--	--

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	63	3	.51	49	8	1.1
2	218	12	7.1	63	3	.51	52	7	.98
3	218	10	5.9	54	3	.44	63	7	1.2
4	162	9	3.9	67	3	.54	--	--	--
5	130	8	2.8	58	3	.47	--	--	--
6	124	7	2.3	708	175	437	--	--	--
7	119	5	1.6	636	142	275	--	--	--
8	108	5	1.5	462	46	57	257	138	96
9	100	4	1.1	400	32	35	130	51	18
10	100	4	1.1	--	--	--	69	30	5.6
11	85	4	.92	--	--	--	47	22	2.8
12	71	4	.77	--	--	--	37	20	2.0
13	100	8	2.2	--	--	--	65	19	3.3
14	253	34	23	--	--	--	83	17	3.8
15	218	10	5.9	--	--	--	45	16	1.9
16	146	5	2.0	--	--	--	34	15	1.4
17	124	4	1.3	--	--	--	28	15	1.1
18	121	4	1.3	--	--	--	24	15	.97
19	105	3	.85	90	5	1.2	21	15	.85
20	95	3	.77	90	4	.97	23	17	1.1
21	85	2	.46	71	4	.77	462	802	1180
22	78	2	.42	60	4	.65	222	193	136
23	75	2	.41	52	4	.56	85	63	14
24	69	2	.37	80	18	9.4	49	42	5.6
25	63	2	.34	1680	908	4570	33	30	2.7
26	50	3	.41	804	274	757	40	23	2.5
27	50	3	.41	284	28	21	31	21	1.8
28	67	3	.54	176	17	8.1	27	20	1.5
29	69	3	.56	119	12	3.9	50	21	2.8
30	67	3	.54	80	9	1.9	38	26	2.7
31	--	--	--	58	8	1.3	--	--	--
TOTAL	--	--	--	--	--	--	--	--	--

04201500 ROCKY RIVER NEAR BEREA, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	85	33	7.6	16	8	.35	8.6	8	.19
2	44	24	2.9	15	7	.28	8.6	8	.19
3	27	13	.95	13	6	.21	8.6	8	.19
4	20	10	.54	12	5	.16	10	9	.24
5	16	9	.39	12	5	.16	18	13	.63
6	14	9	.34	12	5	.16	11	10	.30
7	13	9	.32	14	5	.19	23	24	1.5
8	12	9	.29	10	6	.16	12	11	.36
9	13	9	.32	10	6	.16	11	10	.30
10	15	9	.36	14	6	.23	10	10	.27
11	--	--	--	20	6	.32	9.8	10	.26
12	--	--	--	14	6	.23	9.8	10	.26
13	--	--	--	11	6	.18	222	254	335
14	--	--	--	10	6	.16	350	260	292
15	--	--	--	10	6	.16	116	94	29
16	--	--	--	10	5	.14	42	57	6.5
17	--	--	--	12	5	.16	25	22	1.5
18	--	--	--	10	5	.14	--	--	--
19	33	44	6.0	9.8	5	.13	--	--	--
20	31	30	2.5	9.8	5	.13	--	--	--
21	27	20	1.5	13	14	.49	--	--	--
22	20	14	.76	19	31	2.1	--	--	--
23	15	10	.41	12	8	.26	--	--	--
24	140	347	219	15	6	.24	--	--	--
25	239	247	169	13	5	.18	--	--	--
26	108	92	27	12	5	.16	--	--	--
27	75	30	6.1	10	6	.16	--	--	--
28	47	12	1.5	9.8	6	.16	--	--	--
29	29	12	.94	9.2	6	.15	60	58	9.4
30	22	11	.65	8.6	7	.16	49	39	5.2
31	18	10	.49	9.2	7	.17	--	--	--
TOTAL	--	--	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

						PARTICLE SIZE										
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
DATE	TIME	WATER TEMP-ERA-TURE (°C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
MAY 25,1971	1530	19.0	2560	1200	8290	37	49	63	80	90	95	97	100	--	--	--
JULY 24....	1600	25.0	293	676	535	48	63	75	86	95	97	99	100	--	--	--
SEPT. 29...	1325	22.0	60	60	9.7	72	88	93	97	98	99	100	--	--	--	--

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO

LOCATION.--Lat 41°08'08", long 81°32'50", Summit County, on North Portage Path bridge at Old Portage, 1.2 miles downstream from Little Cuyahoga River, and 4 miles northwest of Akron City Hall.

DRAINAGE AREA.--404 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1966-67, 1969-70 (partial-record station); October 1970 to September 1971.
Water temperatures: October 1970 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 2,710 micromhos Feb. 5; minimum, 180 micromhos Mar. 18.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.							
12...	0800	170	240	0	79	66	.4
15...	1300	--	--	--	--	--	--
31...	1530	311	140	0	79	56	.4
NOV.							
02...	0900	281	142	0	75	55	.4
23...	0800	545	115	0	58	37	.3
DEC.							
15...	1820	821	86	0	61	29	.2
30...	0900	362	114	0	73	55	.2
JAN.							
13...	1300	350	112	0	65	47	.5
30...	0830	205	136	0	87	180	.3
FEB.							
02...	1415	144	148	0	85	82	.3
28...	0900	2090	62	0	43	33	.3
MAR.							
03...	1400	1620	70	0	40	30	.2
06...	0900	947	70	0	43	46	.2
APR.							
01...	1530	611	92	0	53	46	.2
27...	1730	159	148	0	78	74	.3
MAY							
05...	1115	159	157	0	78	74	.2
16...	1930	491	115	0	62	50	.2
JUNE							
03...	1100	191	142	0	74	58	.2
03...	1135	--	--	--	--	--	--
20...	1930	79	165	5	92	88	.3
JULY							
02...	1130	144	158	0	86	85	.3
22...	1035	103	162	4	100	110	.3
AUG.							
04...	1145	--	--	--	--	--	--
26...	1130	58	178	0	110	140	.3
31...	2030	101	156	0	97	90	.3
SEP.							
12...	2000	49	176	4	110	110	.3
29...	2040	248	122	0	69	58	.3

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO--Continued

EXTREMES, 1970-71--Continued
Water temperatures: Maximum, 32.0°C July 9; minimum, 0.5°C Feb. 9, 10, 14.

Period of record:
Specific conductance: Maximum, 2,710 micromhos Feb. 5, 1971; minimum, 180 micromhos Mar. 18, 1971.
Water temperatures. Maximum, 32.0°C July 9, 1971; minimum, 0.5°C Feb. 9, 10, 14, 1971.

REMARKS.--Continuous water-quality recorder operated since October 1970. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected three times during the year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
12...	6.8	440	290	93	723	--	--
15...	--	--	--	--	--	10	.3
31...	8.5	316	190	76	541	--	--
NOV.							
02...	7.0	334	200	84	552	--	--
23...	4.6	256	160	66	430	--	--
DEC.							
15...	6.1	228	130	60	363	--	--
30...	7.1	314	170	76	504	--	--
JAN.							
13...	7.0	276	160	68	461	--	--
30...	9.2	558	210	98	967	--	--
FEB.							
02...	9.8	410	220	99	666	--	--
26...	5.1	184	100	49	303	--	--
MAR.							
03...	5.0	180	98	40	285	--	--
06...	5.1	222	110	52	367	--	--
APR.							
01...	4.9	226	140	64	421	--	--
27...	7.4	396	220	99	657	--	--
MAY							
05...	8.2	440	240	110	661	--	--
16...	8.8	320	170	76	495	--	--
JUNE							
03...	6.5	472	210	94	604	--	--
03...	--	--	--	--	--	15	61
20...	8.8	506	260	120	744	--	--
JULY							
02...	8.8	442	240	110	708	--	--
22...	11	556	290	150	864	--	--
AUG.							
04...	--	--	--	--	--	--	2.0
26...	8.5	596	310	160	965	--	--
31...	8.5	472	250	120	750	--	--
SEP.							
12...	16	510	300	150	884	--	--
29...	7.2	316	180	80	545	--	--

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	850	590	553	535	436	351	492	396	---	---	340	274
2	790	560	628	463	395	366	542	434	763	502	490	240
3	700	530	598	475	394	361	536	489	634	502	550	260
4	680	550	583	493	---	---	677	536	2040	619	740	540
5	670	510	544	508	---	---	546	450	2710	757	700	620
6	640	560	550	508	---	---	450	380	757	412	840	640
7	659	614	580	508	---	---	406	367	424	355	730	690
8	703	659	550	472	---	---	462	381	601	400	750	680
9	722	689	982	496	---	---	471	408	418	313	800	680
10	783	702	538	493	---	---	448	418	406	283	760	670
11	806	707	550	514	---	---	462	422	532	295	740	370
12	774	720	541	493	---	---	450	432	835	523	420	370
13	751	475	571	529	---	---	1130	426	751	508	470	400
14	595	520	538	508	---	---	1200	626	658	418	410	370
15	632	524	508	424	622	382	631	568	577	493	390	360
16	700	535	433	406	801	306	572	527	619	487	390	360
17	642	540	424	412	452	317	694	502	823	508	480	190
18	665	491	418	412	408	312	650	500	1000	658	450	180
19	667	544	415	406	419	356	574	526	757	532	370	330
20	665	557	427	397	378	336	617	536	532	406	460	310
21	675	543	427	376	404	323	791	524	406	385	460	420
22	718	487	421	364	459	369	1230	612	529	376	430	390
23	730	544	418	394	463	400	771	648	391	286	430	350
24	719	581	430	391	400	311	702	585	340	298	500	330
25	616	576	466	418	405	327	766	643	352	280	470	340
26	751	553	472	454	524	377	902	722	331	268	440	350
27	624	477	493	457	837	456	819	690	334	292	430	340
28	573	546	505	448	604	526	736	634	301	259	430	320
29	682	538	463	370	575	500	723	579	---	---	460	340
30	619	514	427	412	573	468	1110	607	---	---	470	440
31	553	528	---	---	554	425	713	692	---	---	460	430
MONTH	850	475	982	364	---	---	1230	367	2710	259	840	180

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	450	360	714	650	573	471	---	---	810	684	822	762
2	438	408	720	660	687	507	750	696	810	692	814	691
3	440	420	714	650	669	525	762	672	830	798	801	741
4	450	396	714	630	651	582	714	662	858	812	805	711
5	446	414	704	657	662	465	732	660	847	803	---	---
6	464	432	684	507	672	570	768	656	930	806	---	---
7	468	426	663	546	---	---	792	656	943	813	---	---
8	458	432	579	495	---	---	816	642	957	887	---	---
9	476	444	537	486	---	---	830	774	1020	907	---	---
10	482	452	516	480	---	---	840	770	1020	543	---	---
11	498	450	531	477	---	---	858	636	980	793	---	---
12	494	444	546	492	---	---	824	770	970	820	---	---
13	522	476	561	507	---	---	846	792	850	753	---	---
14	534	504	564	501	---	---	890	774	---	---	---	---
15	536	494	534	486	---	---	902	764	---	---	---	---
16	530	500	564	486	---	---	864	624	---	---	---	---
17	528	482	582	474	---	---	858	792	---	---	---	---
18	506	476	585	534	---	---	902	776	---	---	---	---
19	518	486	588	489	---	---	902	660	---	---	---	---
20	540	470	621	486	---	---	822	714	---	---	---	---
21	614	518	681	540	---	---	836	756	---	---	611	533
22	614	534	657	585	---	---	884	780	---	---	689	461
23	588	554	681	540	---	---	824	776	---	---	593	479
24	606	472	669	474	---	---	830	458	---	---	629	518
25	632	594	720	537	---	---	846	744	---	---	635	530
26	644	614	708	627	---	---	818	768	---	---	605	512
27	666	596	645	495	---	---	818	72[illegible]	---	---	656	521
28	692	638	627	513	---	---	798	704	---	---	665	575
29	684	636	600	480	---	---	800	692	---	---	719	485
30	678	618	606	471	---	---	894	702	757	691	695	497
31	---	---	558	492	---	---	848	764	776	725	---	---
MONTH	692	360	720	471	---	---	902	458	---	---	---	---
YEAR	2710	180										

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	7.6	7.5	7.0	6.9	7.2	7.1	---	---	6.8	6.6
2	---	---	7.5	7.3	7.0	6.9	7.1	7.0	7.2	6.9	6.9	6.8
3	---	---	7.7	7.3	7.2	6.9	7.1	7.1	7.2	7.0	7.0	6.9
4	---	---	7.6	7.5	---	---	7.2	7.0	7.0	6.9	7.0	6.9
5	---	---	7.5	7.5	---	---	7.3	7.2	7.2	6.8	7.2	6.8
6	---	---	7.6	7.5	---	---	7.3	7.2	7.0	6.9	6.9	6.8
7	---	---	7.7	7.6	---	---	7.2	7.1	7.0	6.9	7.0	6.9
8	---	---	7.6	7.6	---	---	7.2	7.1	7.3	6.9	7.1	7.0
9	---	---	---	---	---	---	7.1	7.0	7.2	6.9	7.1	7.0
10	---	---	---	---	---	---	7.1	7.0	7.1	7.0	7.0	7.0
11	---	---	---	---	---	---	7.3	7.0	7.0	6.9	7.1	7.0
12	---	---	---	---	---	---	7.0	7.0	7.1	6.9	7.4	7.0
13	---	---	---	---	---	---	7.0	6.9	7.0	6.9	7.1	6.9
14	---	---	---	---	---	---	7.1	6.8	7.0	7.0	7.0	6.8
15	---	---	---	---	7.4	6.9	7.3	7.0	7.2	7.0	7.0	6.9
16	---	---	---	---	7.4	7.2	7.2	7.1	7.2	7.0	7.0	7.0
17	---	---	---	---	7.9	7.2	7.1	7.0	7.3	6.9	7.0	7.0
18	---	---	---	---	7.7	7.2	7.0	7.0	7.2	6.9	7.2	7.0
19	---	---	---	---	7.3	7.0	7.1	7.0	6.9	6.9	7.5	7.0
20	---	---	---	---	7.4	7.3	7.0	6.9	6.9	6.9	7.1	7.0
21	---	---	---	---	7.4	7.2	7.5	6.9	7.0	6.9	7.0	6.9
22	---	---	---	---	7.2	7.1	7.4	7.0	7.0	6.9	7.0	6.9
23	---	---	---	---	7.1	7.0	7.0	6.9	6.9	6.9	7.1	6.9
24	---	---	---	---	7.3	7.1	7.0	6.9	7.1	6.8	7.2	7.0
25	---	---	---	---	7.2	7.1	7.0	6.9	6.9	6.8	7.0	6.9
26	---	---	---	---	7.3	7.2	7.2	6.9	6.9	6.8	7.0	6.9
27	7.6	7.4	---	---	7.2	7.1	7.1	7.0	6.9	6.8	7.0	6.9
28	7.7	7.5	---	---	7.3	7.2	7.0	7.0	6.9	---	7.0	6.9
29	7.7	7.5	---	---	7.3	7.1	7.0	6.9	---	---	7.1	7.0
30	7.8	7.6	---	---	7.3	7.1	7.0	6.9	---	---	7.2	7.0
31	7.8	7.6	---	---	7.5	7.1	7.0	6.9	---	---	7.1	6.9
MONTH	---	---	---	---	---	---	7.5	6.8	7.3	6.8	7.5	6.6

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.1	6.9	8.3	7.4	7.5	7.3	---	---	7.8	7.2	7.6	7.3
2	7.2	6.9	8.2	7.4	7.4	7.2	7.6	7.4	7.9	7.2	7.6	7.2
3	7.2	6.9	8.5	7.4	7.5	7.0	7.6	7.3	7.7	7.2	7.6	7.3
4	7.2	6.9	8.6	7.4	7.5	7.2	7.6	7.2	8.0	7.2	7.5	7.2
5	7.6	6.9	8.4	7.4	7.4	7.2	7.7	7.2	7.9	7.5	---	---
6	7.4	6.9	7.8	7.3	7.4	7.3	7.7	7.2	8.0	7.5	---	---
7	7.5	6.9	8.0	7.6	---	---	7.9	7.2	7.8	7.4	---	---
8	7.6	6.9	8.1	7.5	---	---	8.0	7.2	7.7	7.4	---	---
9	7.6	6.8	7.9	7.5	---	---	8.0	7.2	7.8	7.0	---	---
10	7.7	6.9	8.0	7.5	---	---	8.1	7.2	7.4	6.9	---	---
11	7.7	6.8	8.1	7.5	---	---	7.7	7.3	7.6	7.3	---	---
12	7.8	7.0	7.8	7.4	---	---	8.2	7.3	7.6	7.3	---	---
13	7.7	6.8	7.8	7.5	---	---	7.8	7.3	7.5	7.3	---	---
14	8.3	6.8	7.9	7.5	---	---	7.6	7.3	---	---	---	---
15	8.3	7.6	7.9	7.5	---	---	7.6	7.2	---	---	---	---
16	8.4	7.6	7.9	7.4	---	---	7.6	7.1	---	---	---	---
17	8.1	7.5	7.9	7.4	---	---	7.6	7.2	---	---	---	---
18	8.4	7.6	8.0	7.4	---	---	7.7	7.2	---	---	---	---
19	8.4	7.6	8.1	7.3	---	---	7.4	7.2	---	---	---	---
20	8.5	7.6	8.2	7.3	---	---	7.5	7.2	---	---	---	---
21	8.5	7.5	8.0	7.2	---	---	7.4	7.1	---	---	7.7	7.5
22	8.3	7.4	8.2	7.1	---	---	7.6	7.2	---	---	7.7	7.5
23	8.6	7.4	8.2	7.1	---	---	7.7	7.3	---	---	7.7	7.6
24	8.4	7.4	7.9	7.0	---	---	7.4	7.1	---	---	8.1	7.6
25	8.6	7.5	7.5	7.1	---	---	7.6	7.3	---	---	7.8	7.6
26	8.3	7.4	7.5	7.4	---	---	7.5	7.3	---	---	7.7	7.5
27	8.6	7.4	7.4	7.3	---	---	7.6	7.3	---	---	7.8	7.3
28	8.4	7.4	7.4	7.2	---	---	7.6	7.2	---	---	7.8	7.5
29	8.0	7.4	7.4	7.2	---	---	7.6	7.2	---	---	7.8	7.3
30	8.3	7.5	7.4	7.2	---	---	7.5	7.3	7.5	7.4	7.8	7.5
31	---	---	7.6	7.3	---	---	7.7	7.3	7.6	7.3	---	---
MONTH	8.6	6.8	8.6	7.0	---	---	8.2	7.1	---	---	---	---

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.9	8.4	11.7	11.1	13.4	12.8	---	---	13.1	9.6
2	---	---	8.8	5.2	11.5	11.3	13.7	13.3	12.9	11.4	13.2	12.8
3	---	---	8.6	8.0	11.3	10.3	14.0	13.5	12.4	10.9	13.1	12.8
4	---	---	8.7	8.3	---	---	13.5	12.7	11.3	10.3	13.3	12.9
5	---	---	8.6	8.1	---	---	13.7	13.1	12.8	10.3	13.1	12.6
6	8.3	5.0	8.8	8.2	---	---	14.3	13.5	13.5	12.8	12.7	12.1
7	---	---	9.0	8.3	---	---	14.3	13.4	13.5	13.0	12.9	12.3
8	---	---	9.3	8.8	---	---	14.3	13.3	13.2	12.4	13.2	12.8
9	---	---	10.3	8.3	---	---	14.0	13.4	13.4	12.6	13.1	12.7
10	---	---	9.6	8.6	---	---	13.9	13.3	13.3	12.4	13.0	12.4
11	---	---	9.0	8.1	---	---	13.7	12.7	13.1	12.2	13.0	12.3
12	---	---	8.2	7.6	---	---	13.3	12.6	12.3	12.0	12.7	11.9
13	---	---	8.3	7.8	---	---	12.7	10.8	12.7	12.1	12.8	11.8
14	---	---	8.6	8.0	---	---	10.8	10.1	13.0	12.5	12.9	12.3
15	---	---	10.0	8.4	13.1	12.1	10.6	10.3	12.8	11.7	12.3	11.5
16	---	---	11.8	9.8	13.3	12.8	10.4	9.9	12.6	11.9	12.3	11.5
17	---	---	12.2	11.7	13.4	12.9	11.5	9.6	12.0	10.6	12.8	12.3
18	---	---	12.1	11.6	13.5	12.9	11.4	10.6	11.2	10.2	13.0	12.3
19	---	---	12.2	11.7	13.1	12.8	10.8	10.2	11.1	10.7	12.3	11.7
20	---	---	11.9	11.3	13.2	12.8	11.2	9.9	11.6	11.0	12.4	11.8
21	---	---	11.7	11.4	13.1	12.4	10.6	9.9	11.9	11.6	12.9	12.2
22	---	---	11.6	11.1	13.3	12.2	10.2	9.7	11.8	11.0	12.4	12.1
23	---	---	12.6	11.4	13.1	12.0	10.0	9.4	11.7	11.3	12.4	12.1
24	---	---	13.0	12.4	13.1	12.1	10.8	9.5	11.8	11.4	13.0	12.3
25	---	---	12.4	10.1	13.2	12.8	10.7	9.5	11.9	11.1	13.0	12.4
26	---	---	10.6	10.2	13.1	12.6	9.7	8.7	11.4	9.9	12.7	12.1
27	---	---	11.2	10.6	12.7	12.2	10.8	9.5	11.0	8.2	12.3	11.8
28	---	---	11.0	10.6	12.6	11.6	10.3	9.6	11.7	8.2	12.0	11.6
29	---	---	11.4	9.1	11.8	10.9	10.0	8.9	---	---	11.7	11.2
30	---	---	11.6	11.2	12.9	10.8	10.6	9.0	---	---	12.0	11.3
31	8.6	8.4	---	---	13.2	12.6	10.4	10.3	---	---	12.7	11.4
MONTH	---	---	13.0	5.2	---	---	14.3	8.7	13.5	8.2	13.3	9.6

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	10.6	12.6	6.9	5.8	4.1	---	---	5.3	4.8	---	---
2	12.0	10.5	13.0	5.6	5.0	4.0	5.8	4.2	6.5	4.7	5.8	4.0
3	11.8	10.5	14.2	7.3	5.6	3.2	5.5	3.7	5.7	4.6	5.9	3.7
4	12.0	10.7	14.0	6.0	4.0	0.8	6.1	3.4	7.7	4.1	4.1	3.6
5	11.8	10.2	12.6	5.3	3.5	1.8	6.0	3.3	6.8	3.8	---	---
6	12.3	9.7	7.6	3.8	3.1	2.5	6.2	3.2	7.0	3.9	---	---
7	13.2	10.5	7.9	6.6	---	---	7.3	3.1	5.5	4.0	---	---
8	13.2	9.8	6.9	6.0	---	---	7.2	3.2	5.1	4.3	---	---
9	12.9	9.6	8.2	6.2	---	---	6.8	2.7	5.6	3.6	---	---
10	12.8	9.1	9.3	6.8	---	---	7.2	2.5	6.0	3.2	---	---
11	12.4	8.6	9.0	6.3	---	---	4.7	2.6	5.1	4.3	---	---
12	12.3	7.5	7.7	6.6	---	---	7.5	2.9	5.9	4.5	---	---
13	10.8	6.3	8.2	6.7	---	---	5.2	2.6	5.5	5.3	---	---
14	12.0	8.3	8.4	6.6	---	---	5.0	2.6	---	---	---	---
15	11.2	8.2	8.2	6.1	---	---	5.7	3.4	---	---	---	---
16	11.6	7.7	7.9	4.6	---	---	5.3	3.2	---	---	---	---
17	9.3	7.9	9.1	6.3	---	---	5.5	3.1	---	---	---	---
18	11.7	8.0	8.3	5.1	---	---	6.7	3.1	---	---	---	---
19	11.3	7.1	8.0	4.7	---	---	4.0	3.2	---	---	---	---
20	11.3	6.6	8.5	4.7	---	---	5.6	3.6	---	---	---	---
21	12.5	6.4	8.9	4.7	---	---	4.8	3.3	---	---	6.9	6.6
22	12.2	7.6	9.2	5.2	---	---	5.6	3.4	---	---	6.8	6.1
23	12.3	5.2	8.8	4.8	---	---	5.7	3.2	---	---	6.5	5.9
24	12.3	6.2	7.8	2.3	---	---	4.1	3.3	---	---	6.6	5.9
25	13.2	6.1	5.9	3.2	---	---	4.4	3.6	---	---	6.8	6.3
26	10.9	6.0	6.5	4.9	---	---	4.6	3.7	---	---	6.6	5.9
27	12.7	6.1	5.7	4.2	---	---	5.8	4.1	---	---	6.5	5.0
28	13.9	7.1	6.0	4.2	---	---	4.9	4.2	---	---	6.4	5.7
29	11.0	7.1	6.0	4.3	---	---	4.9	4.0	---	---	6.3	5.4
30	12.6	7.1	6.1	4.5	---	---	5.4	4.3	---	---	6.6	5.8
31	---	---	6.8	4.5	---	---	6.3	4.8	---	---	---	---
MONTH	13.9	5.2	14.2	2.3	---	---	7.5	2.5	---	---	---	---

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	20.0	15.5	14.0	9.0	8.0	3.5	2.0	---	---	---	2.5
2	21.0	19.5	16.5	13.5	9.5	8.0	3.0	2.0	3.5	3.0	3.0	2.5
3	20.5	19.5	15.5	14.0	9.5	7.5	3.5	2.0	6.0	3.0	3.0	2.0
4	19.5	18.5	15.0	13.5	---	---	5.5	3.0	7.0	5.5	2.5	1.5
5	19.5	18.0	14.0	12.0	---	---	4.5	3.0	7.0	2.5	3.5	2.5
6	21.0	19.0	13.5	12.0	---	---	3.0	1.5	2.5	1.0	4.0	3.5
7	20.5	17.5	13.0	11.0	---	---	2.0	1.0	1.5	1.0	3.5	2.0
8	20.5	19.0	12.5	10.0	---	---	3.0	1.0	2.0	1.0	2.5	1.5
9	20.5	19.5	13.5	10.0	---	---	3.0	1.0	2.0	0.5	4.0	2.0
10	20.0	19.0	14.0	12.0	---	---	2.5	1.5	2.5	0.5	4.0	2.5
11	19.0	18.5	15.0	13.5	---	---	4.5	1.5	4.0	1.5	4.0	2.5
12	19.5	18.5	15.5	13.5	---	---	4.5	3.5	4.0	2.5	4.5	3.0
13	20.0	19.0	16.0	13.5	---	---	5.0	4.0	3.5	1.0	4.5	3.5
14	19.5	18.5	15.0	11.5	---	---	6.5	4.5	2.0	0.5	5.5	3.0
15	19.0	18.0	12.0	8.5	5.0	4.0	5.0	3.5	3.5	1.0	7.0	4.5
16	18.0	17.0	9.5	7.5	4.0	3.0	4.0	3.5	4.0	2.5	7.0	5.0
17	17.0	15.5	9.0	7.0	4.5	3.0	4.0	1.5	5.0	3.0	5.0	2.5
18	15.5	14.5	9.5	7.0	4.5	3.5	3.5	2.0	5.0	2.5	5.0	1.5
19	15.0	14.0	9.5	7.0	5.0	4.0	3.5	2.5	4.5	3.0	5.0	2.0
20	15.0	14.0	9.5	8.0	4.5	4.0	7.0	2.5	3.0	2.0	5.0	2.5
21	15.0	15.0	9.0	6.5	4.5	3.0	5.0	3.0	2.0	1.0	4.5	2.0
22	15.5	15.0	8.0	6.0	5.0	3.5	6.0	4.0	3.0	1.5	5.0	4.0
23	16.0	15.0	7.5	5.0	5.5	4.5	5.5	4.0	2.5	1.5	4.5	3.5
24	16.0	15.5	6.5	3.5	5.0	2.5	5.5	3.5	2.0	1.0	5.5	2.0
25	15.5	15.0	5.0	3.5	2.5	1.5	6.0	4.0	3.5	1.5	5.0	3.5
26	15.5	15.0	6.0	5.0	2.0	1.0	7.0	2.5	4.0	3.0	5.0	3.5
27	17.0	15.0	7.0	5.0	2.0	1.5	3.5	2.0	4.0	3.5	6.5	4.0
28	16.5	14.5	8.5	7.5	3.0	1.0	4.0	3.5	---	3.0	7.5	4.5
29	17.5	15.5	10.0	8.0	3.5	2.5	5.0	3.5	---	---	7.0	4.5
30	18.0	16.5	9.0	7.5	4.0	3.0	5.0	2.5	---	---	7.0	5.5
31	17.0	14.5	---	---	4.0	3.0	2.5	2.0	---	---	8.5	5.0
MONTH	21.0	14.0	16.5	3.5	---	---	7.0	1.0	7.0	0.5	8.5	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	6.5	17.0	13.0	25.0	18.5	---	---	28.5	22.5	27.5	23.5
2	9.0	7.0	16.0	13.5	26.0	21.5	30.0	27.0	29.0	23.0	28.5	24.0
3	8.0	6.5	18.0	13.0	27.5	21.0	31.0	24.5	27.5	24.5	27.0	24.5
4	8.0	5.5	20.5	12.5	29.0	23.5	30.0	23.5	26.0	24.0	27.0	24.5
5	8.5	6.0	20.0	16.0	29.0	24.0	29.5	25.5	28.0	21.0	---	---
6	9.0	7.0	19.0	15.0	30.0	26.0	30.5	26.0	29.0	22.0	---	---
7	9.5	7.0	19.0	16.0	---	---	31.5	24.0	29.5	22.5	---	---
8	12.5	7.5	18.5	15.5	---	---	31.0	25.5	30.0	23.0	---	---
9	13.5	9.0	18.5	15.0	---	---	32.0	27.5	30.0	24.0	---	---
10	12.5	9.5	21.0	14.5	---	---	30.5	26.5	29.0	22.0	---	---
11	15.0	9.5	21.0	16.5	---	---	29.0	25.0	30.5	27.0	---	---
12	16.0	10.5	19.5	17.5	---	---	31.5	25.5	28.5	25.0	---	---
13	15.5	12.0	19.5	17.0	---	---	30.0	25.5	28.5	23.5	---	---
14	14.0	12.0	21.5	16.5	---	---	29.5	25.5	---	---	---	---
15	15.0	11.5	21.5	16.5	---	---	29.5	24.0	---	---	---	---
16	16.0	11.5	21.0	17.0	---	---	31.5	23.0	---	---	---	---
17	14.0	12.0	23.5	17.5	---	---	28.5	26.0	---	---	---	---
18	15.5	11.5	26.5	19.5	---	---	29.5	22.5	---	---	---	---
19	18.0	11.5	27.5	21.5	---	---	26.5	25.0	---	---	---	---
20	19.0	13.0	27.0	22.0	---	---	29.0	25.0	---	---	---	---
21	16.0	13.0	25.0	21.0	---	---	29.5	24.0	---	---	23.0	20.5
22	13.0	15.0	25.5	19.5	---	---	31.0	24.5	---	---	23.5	19.0
23	19.0	12.5	26.5	18.5	---	---	30.0	25.0	---	---	23.0	20.5
24	15.0	13.0	24.5	20.0	---	---	28.5	23.0	---	---	22.5	19.0
25	17.5	12.5	24.0	21.0	---	---	31.0	27.0	---	---	21.5	18.5
26	14.5	13.0	21.5	20.5	---	---	29.0	26.0	---	---	21.0	19.0
27	16.0	12.0	20.5	19.5	---	---	29.5	25.0	---	---	22.0	19.0
28	17.5	14.0	21.5	18.0	---	---	29.5	24.5	---	---	25.5	21.5
29	15.0	14.0	23.0	17.5	---	---	29.5	24.5	---	---	26.5	23.5
30	17.5	15.0	24.0	17.5	---	---	26.0	24.0	28.0	25.5	26.5	23.0
31	---	---	24.0	18.0	---	---	28.5	24.0	28.0	23.5	---	---
MONTH	19.0	5.5	27.5	12.5	---	---	32.0	22.5	---	---	---	---
YEAR	32.0	0.5										

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO

LOCATION.--Lat 41°23'43", long 81°37'48", in T.6 N., R.12 W., Cuyahoga County, at gaging station on left bank 240 ft downstream from bridge on Old Rockside Road, 0.8 mile northeast of Independence, and 3 miles downstream from Tinkers Creek.

DRAINAGE AREA.--707 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1948 to September 1949, July 1965 to September 1971.
Water temperatures: October 1948 to September 1949, October 1952 to September 1971.
Sediment records: October 1950 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 2,000 micromhos Feb. 5; minimum, 255 micromhos Feb. 21.
Dissolved oxygen: Maximum, 13.2 mg/l Feb. 2; minimum, 1.0 mg/l Sept. 13.
Water temperatures: Maximum, 28.5°C June 28, 29; minimum, 0.5°C Jan. 27-29,31, Feb. 1.
Sediment concentrations: Maximum daily, 1,590 mg/l June 8; minimum daily, 7 mg/l July 8, Aug. 18, Sept. 9, 11.
Sediment discharges: Maximum daily, 15,500 tons Feb. 23; minimum daily 2.7 tons Sept. 11.

Period of record:
Specific conductance (1968-71): Maximum, 2,000 micromhos Oct. 17, 23, 24, 1968, Sept. 16, 17, 1969, Aug. 26, 1970, Feb. 5, 1971; minimum, 255 micromhos Feb. 21, 1971.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.							
08...	1600	244	174	0	110	170	1.1
13...	1600	4760	104	0	68	38	1.0
15...	1030	--	--	--	--	--	--
NOV.							
12...	1600	406	156	0	120	160	.7
17...	1600	1630	112	0	93	54	.4
DEC.							
01...	1600	1360	116	1	79	56	.3
31...	1600	650	134	0	99	110	.3
JAN.							
05...	1600	1750	102	0	74	75	.3
28...	1600	298	158	0	130	280	.5
FEB.							
02...	1115	346	166	0	130	220	.7
25...	1600	3490	85	0	53	74	.2
MAR.							
02...	1600	2550	73	0	56	50	.2
11...	1700	1500	99	0	75	140	.3
APR.							
01...	1300	950	111	0	90	99	.4
29...	1600	342	162	0	130	240	.5
MAY							
04...	1015	300	169	0	120	150	.5
25...	1600	2000	141	0	86	79	.4
JUNE							
02...	1100	--	--	--	--	--	--
08...	1600	920	142	0	94	67	.4
17...	1600	212	187	0	140	260	.6
JULY							
09...	1225	188	174	0	120	410	.6
20...	1600	399	102	0	83	110	.4
AUG.							
10...	1600	202	176	0	160	220	.5
31...	1600	244	156	4	120	190	.5
SEP.							
02...	1600	192	174	0	130	310	.7
14...	1600	405	119	0	91	94	.4

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

						PARTICLE SIZE										
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
DATE	TIME	WATER TEMP-ERA-TURE (°C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
OCT. 13,1970	1300	20.0	5170	345	4820	66	82	92	98	99	100	--	--	--	--	--
JUNE 21,1971	1800	26.0	2340	862	5450	70	86	96	99	99	100	--	--	--	--	--
JULY 24.....	1530	23.0	880	897	2130	58	69	77	92	99	99	100	--	--	--	--

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO--Continued

EXTREMES.--Period of record--Continued
Dissolved oxygen (1970-71): Maximum, 13.2 mg/l Feb. 2, 1971; minimum, 1.0 mg/l Sept. 13, 1971.
Water temperatures (1948-49, 1952-67, 1968-71): Maximum, 31.0°C Aug. 18, 1949; minimum, freezing point on many days during winter periods.
Sediment concentrations: Maximum daily, 4,800 mg/l Aug. 21, 1960; minimum daily, 1 mg/l Sept. 4, 10, 1955.
Sediment discharges: Maximum daily, 51,400 tons Mar. 5, 1964; minimum daily, 0.25 ton Sept. 4, 1955.

REMARKS.--Continuous water-quality recorder operated since July 1965. Maximum recorded dissolved oxygen concentrations of 14.2 mg/l occurred Dec. 27, 1967 and Jan. 27, 1969. Minimum recorded dissolved oxygen concentrations of 0.0 mg/l occurred Oct. 23, 1965, Feb. 10-12, June 23, July 26, 1966. Specific conductance values listed as 2,000 micromhos represent values of 2,000 micromhos or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on the maximum specific conductance and the minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. Natural flow of stream affected by diversions, storage reservoirs and power plants. Some diversion from the Tuscarawas drainage into this basin at Portage Lakes. Water diverted into Ohio Canal at Brecksville, 6 miles above station, bypasses station. These records do not include flow in canal except above about 15,000 cfs, when channels merge.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.							
08...	14	614	250	110	1030	--	--
13...	12	284	150	65	446	--	--
15...	--	--	--	--	--	16	[illegible]
NOV.							
12...	21	600	250	120	1000	--	--
17...	8.8	306	180	88	527	--	--
DEC.							
01...	11	338	180	84	566	--	--
31...	16	490	230	120	843	--	--
JAN.							
05...	9.6	364	170	86	600	--	--
28...	26	830	260	130	1470	--	--
FEB.							
02...	31	730	280	140	1280	--	--
25...	14	304	140	70	540	--	--
MAR.							
02...	8.7	238	120	60	424	--	--
11...	9.7	476	170	89	810	--	--
APR.							
01...	10	416	190	99	714	--	--
29...	22	774	270	140	1370	--	--
MAY							
04...	27	638	270	130	1070	--	--
25...	8.1	428	200	84	665	--	--
JUNE							
02...	--	--	--	--	--	79	2.2
08...	11	412	220	100	648	--	--
17...	26	872	290	140	1450	--	--
JULY							
09...	23	1040	300	160	1780	--	--
20...	13	424	170	80	718	--	--
AUG.							
10...	23	1000	310	160	1660	--	--
31...	20	680	270	140	1120	--	--
SEP.							
02...	28	914	270	130	1560	--	--
14...	11	400	180	90	690	--	--

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	910	750	924	716	575	555	1080	980	1580	1300	467	447
2	960	890	786	586	650	565	1210	1070	1370	1230	471	444
3	980	840	614	476	681	551	1140	1020	1320	1170	543	471
4	980	840	610	556	709	527	1050	623	1570	1220	625	543
5	980	890	650	610	562	534	684	604	2000	899	730	625
6	1060	830	687	640	595	559	704	676	903	835	736	688
7	1300	1060	712	680	708	580	815	689	835	726	727	635
8	1280	988	738	712	771	662	841	741	904	720	693	659
9	1030	961	761	719	789	689	796	732	959	873	758	718
10	1010	890	946	738	732	695	836	742	913	803	788	726
11	1020	918	1010	821	807	707	797	723	944	804	840	760
12	983	861	1010	922	760	522	837	745	1100	832	837	767
13	861	444	968	872	542	524	914	768	1350	1090	858	686
14	542	430	938	840	575	545	1260	870	1140	1010	686	606
15	558	476	789	521	630	582	953	797	1050	985	611	---
16	626	558	541	503	695	630	929	801	1030	953	612	---
17	789	620	553	513	804	614	972	872	1140	938	607	587
18	827	737	635	553	630	596	1090	888	1220	811	607	529
19	804	740	772	618	695	621	1200	997	811	---	594	560
20	938	746	714	662	714	626	1310	1200	255	---	643	590
21	904	824	742	642	679	631	1410	1150	1250	255	745	642
22	864	774	707	651	746	344	1410	1180	1350	460	754	634
23	818	754	827	653	728	684	1430	1200	1790	437	673	643
24	899	773	784	614	733	337	1510	1330	1600	591	769	673
25	937	835	759	661	784	674	1460	1250	1400	450	868	760
26	914	844	960	715	705	661	1430	1200	547	489	819	765
27	954	856	1120	958	794	702	1530	1370	496	474	770	706
28	997	913	958	772	912	776	1510	1380	476	446	735	685
29	1030	945	772	621	857	821	1440	1270	---	---	699	667
30	1020	799	623	545	943	849	1380	1260	---	---	712	668
31	799	690	---	---	981	919	1720	1240	---	---	795	701
MONTH	1300	430	1120	476	981	337	1720	604	2000	255	868	444

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	734	696	1210	1110	1100	954	1150	952	1570	1320	1530	1260
2	841	711	1180	1100	1410	1060	1150	1020	1700	1400	1620	1470
3	748	696	1180	1010	1400	1130	1230	1150	1560	1390	1990	1450
4	838	700	1170	1040	1330	1030	1280	1160	1600	1420	1500	1060
5	833	745	1340	1150	1120	987	1370	1190	1630	1430	1260	1030
6	824	724	1230	698	993	843	1400	1260	1870	1470	1430	608
7	799	725	769	677	885	785	1490	1330	1860	1480	1360	746
8	810	750	802	686	834	747	1620	1390	1630	1460	1550	1300
9	835	763	752	686	846	792	1820	1300	1610	1440	1560	1360
10	937	755	801	743	1080	842	1410	1280	1650	1450	1790	1350
11	866	796	982	768	1240	1000	1340	824	1650	1440	1530	1310
12	1010	813	1070	836	1230	1090	1300	960	1610	1320	1630	1440
13	894	814	836	731	1270	1180	1090	952	1430	1300	1450	598
14	859	779	812	728	1300	1160	1330	1090	1600	1320	744	568
15	790	742	870	778	1360	1200	1520	1240	1570	1440	991	744
16	775	735	885	813	1470	1320	1690	1230	1560	1340	1220	972
17	806	762	893	749	1500	1380	1780	1260	1400	1250	1250	1090
18	962	776	870	726	1560	1340	1440	1300	1460	1360	1190	999
19	881	833	1340	851	1490	1330	1640	1040	1580	1390	1190	1000
20	918	816	1060	962	1470	996	1600	786	1680	1510	1160	701
21	939	861	1040	963	1200	738	1020	910	1900	1530	1280	676
22	1040	920	1080	961	872	802	1300	1020	1800	1560	976	730
23	1110	1010	1060	970	---	---	1500	1270	1630	1020	1050	888
24	1230	1110	1060	772	---	---	1570	854	1390	1040	1100	960
25	1210	1080	772	631	1100	1030	932	838	1490	1340	1120	954
26	1190	1050	687	627	1180	1010	1080	902	1390	1230	1160	966
27	1180	1040	904	660	1280	1150	1370	1070	1820	1060	1230	528
28	1310	1100	990	888	1220	1140	1430	1300	1810	1030	1020	712
29	1390	1260	971	915	1230	803	1470	1120	1350	1190	1110	934
30	1220	1120	1010	913	1150	992	1410	1110	1330	1160	1240	1110
31	---	---	1010	940	---	---	1360	1110	1270	1160	---	---
MONTH	1390	696	1340	627	1560	738	1820	786	1900	1020	1790	528
YEAR	2000	255										

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.2	6.8	7.8	7.3	10.9	10.2	11.0	10.9	12.8	12.4	12.2	11.4
2	7.0	6.2	8.3	7.3	10.4	10.0	11.1	11.0	13.2	12.7	11.5	11.0
3	6.6	6.1	9.3	8.0	10.5	10.3	11.3	11.0	12.6	11.2	11.3	11.0
4	6.9	6.1	9.4	8.9	11.5	9.0	11.6	10.9	11.2	9.8	11.5	11.2
5	6.7	6.1	9.2	8.2	11.7	11.4	11.8	11.6	12.9	9.5	11.4	10.7
6	6.3	5.4	9.0	7.6	12.4	11.7	11.9	11.8	12.9	12.8	10.8	10.4
7	5.5	5.1	8.6	7.9	12.4	12.2	11.9	11.8	12.9	12.7	11.2	10.5
8	5.3	4.7	8.8	8.4	12.4	11.6	11.8	11.6	12.7	12.1	11.6	11.2
9	4.7	4.1	9.0	8.4	11.6	11.0	11.6	11.3	12.5	11.8	11.6	11.3
10	5.1	3.8	8.5	7.2	11.1	10.6	11.4	10.9	12.4	12.0	11.4	11.2
11	5.4	4.8	8.1	7.4	11.1	9.0	11.0	10.8	12.2	11.3	11.3	10.9
12	5.4	4.9	7.5	7.0	11.7	9.9	11.0	10.4	11.4	10.9	11.4	10.8
13	6.8	3.9	7.3	7.0	12.4	11.4	10.8	10.4	11.9	11.1	11.4	10.7
14	7.9	6.8	7.8	7.1	12.6	12.4	10.5	8.9	12.0	11.8	11.5	10.1
15	8.5	7.9	10.7	7.5	12.4	12.0	10.8	10.2	11.8	11.4	10.2	---
16	8.9	8.5	11.2	10.7	12.2	12.0	10.8	10.5	11.5	10.9	10.9	---
17	8.9	8.3	11.4	11.2	12.5	10.9	10.6	10.2	11.3	10.8	11.4	10.9
18	8.5	8.1	11.3	10.8	12.5	11.2	10.8	10.4	11.9	10.6	11.9	11.4
19	8.2	7.8	10.8	10.7	12.2	11.5	11.0	10.4	12.0	8.7	11.5	10.9
20	8.0	7.3	10.7	10.0	11.8	11.6	11.8	11.0	8.7	7.3	11.5	10.7
21	7.5	6.5	10.9	10.1	11.8	11.6	11.8	11.1	8.2	7.8	11.5	11.1
22	7.2	6.3	10.9	10.6	11.6	9.2	11.5	11.0	6.3	7.6	11.5	11.0
23	7.6	6.9	11.9	11.0	11.6	11.2	11.2	10.7	8.6	7.8	11.5	11.0
24	7.1	6.4	11.9	10.2	11.8	11.3	11.5	11.1	8.7	8.3	11.6	11.3
25	7.3	6.7	11.8	11.6	11.9	11.6	11.5	10.9	12.7	7.6	11.8	11.3
26	7.3	6.6	11.6	11.1	12.0	11.7	11.4	10.9	12.6	12.0	11.5	11.0
27	6.9	6.6	11.2	10.6	11.9	11.7	12.3	10.5	12.1	11.7	11.2	10.4
28	6.9	6.6	10.6	10.1	11.9	11.8	12.5	10.6	12.1	11.8	10.4	9.9
29	7.3	6.6	10.5	10.0	11.8	11.3	12.6	11.9	---	---	10.1	9.7
30	7.0	5.7	11.0	8.9	11.3	11.0	12.1	11.5	---	---	10.2	10.0
31	7.6	6.4	---	---	11.1	10.7	12.4	11.8	---	---	10.4	9.3
MONTH	8.9	3.8	11.9	7.0	12.6	9.0	12.6	8.9	13.2	7.3	12.2	9.3

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.3	8.9	8.3	6.6	5.2	4.0	4.0	2.6	4.3	3.4	4.6	3.5
2	9.3	8.7	8.6	6.7	5.5	4.0	5.5	2.3	4.1	2.4	4.5	2.8
3	9.8	9.3	8.9	6.5	5.0	3.8	4.9	2.9	3.5	3.0	4.6	2.8
4	10.3	9.7	9.7	6.3	5.0	3.2	5.6	3.0	3.4	3.0	4.7	2.5
5	10.9	10.2	8.0	5.1	4.6	3.1	5.5	3.2	4.2	2.4	4.1	2.5
6	10.6	9.7	6.6	3.2	4.1	2.9	6.2	3.0	3.5	1.9	4.4	2.4
7	9.8	9.2	7.8	6.8	4.2	3.3	6.4	2.9	3.6	2.5	3.9	3.0
8	9.7	8.7	7.5	6.0	5.3	3.1	6.7	2.5	3.5	2.6	4.7	3.0
9	9.0	8.4	7.7	7.0	5.6	5.1	6.8	2.7	3.2	2.3	4.9	2.5
10	8.9	8.1	7.4	6.6	5.4	4.3	6.0	2.1	---	---	5.1	3.0
11	9.2	8.2	6.8	6.2	4.6	4.0	4.8	3.1	---	---	4.9	2.7
12	8.6	7.8	7.0	5.7	4.2	3.5	5.6	2.4	---	---	4.8	2.7
13	8.2	7.3	8.2	6.8	4.1	3.2	5.6	3.5	---	---	4.5	1.0
14	8.9	8.0	7.9	6.8	3.8	3.0	5.2	2.7	---	---	5.3	4.0
15	9.6	8.6	7.3	6.3	4.4	3.3	5.1	2.8	---	---	5.5	4.8
16	8.8	8.0	6.9	5.9	4.8	3.6	5.5	2.6	---	---	5.2	3.6
17	8.6	7.9	6.3	5.4	4.8	3.5	5.6	2.1	---	---	5.1	4.8
18	8.7	7.9	6.9	5.1	4.8	3.3	5.7	2.7	---	---	5.1	4.6
19	8.9	7.9	6.2	4.7	4.8	2.5	4.2	2.5	---	---	4.6	4.2
20	8.1	7.0	6.3	4.4	4.6	2.7	3.8	2.5	---	---	5.6	4.1
21	7.6	6.7	6.7	4.5	5.1	3.0	5.7	3.2	---	---	5.9	2.6
22	8.7	7.1	7.3	4.8	5.4	5.0	4.8	3.0	---	---	5.7	5.0
23	8.8	7.8	7.6	4.9	---	---	4.7	3.0	---	---	5.2	4.7
24	7.9	6.2	6.7	4.1	---	---	5.0	3.3	---	---	4.9	4.3
25	8.6	7.6	6.4	5.1	5.0	2.4	4.8	4.2	---	---	5.1	4.4
26	8.2	7.0	6.7	6.3	3.8	2.8	4.7	4.0	---	---	4.8	4.4
27	8.8	7.4	6.6	6.2	4.0	3.0	4.7	3.8	---	---	5.3	3.9
28	8.3	7.0	6.3	5.5	3.8	2.4	4.5	3.6	---	---	5.0	3.9
29	8.0	6.4	5.8	5.2	4.2	1.6	4.1	3.2	---	---	4.3	3.8
30	8.9	6.9	5.3	4.5	4.0	2.8	3.8	3.3	---	---	3.8	3.6
31	---	---	4.8	4.3	---	---	4.3	3.5	---	---	---	---
MONTH	10.9	6.2	9.7	3.2	5.6	1.6	6.8	2.1	---	---	5.9	1.0
YEAR	13.2	1.0										

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	18.0	15.0	14.0	9.5	7.5	3.5	3.0	1.0	0.5	---	---
2	18.5	17.0	14.0	13.5	9.5	8.5	3.5	3.0	---	---	4.5	3.5
3	18.5	17.0	13.5	12.0	8.5	8.0	3.0	2.5	---	---	4.0	2.5
4	17.0	16.5	12.5	12.0	9.0	7.0	3.5	3.0	---	---	3.0	2.5
5	17.0	16.0	12.0	11.5	7.0	6.0	3.5	2.5	---	---	4.5	2.5
6	18.5	17.0	12.0	11.0	6.0	4.0	2.5	2.0	---	---	4.5	4.0
7	19.5	18.0	12.5	11.5	4.0	3.5	2.0	1.0	---	---	4.5	3.0
8	20.0	19.0	12.0	11.5	5.5	3.5	2.0	1.0	---	---	3.0	2.0
9	21.0	19.5	12.0	11.0	6.5	5.5	3.0	1.0	---	---	3.5	2.0
10	21.0	19.0	12.5	12.0	7.0	6.5	3.5	2.5	---	---	3.5	3.0
11	19.0	17.5	13.0	12.5	7.5	6.5	3.5	3.0	---	---	4.5	3.5
12	18.5	17.5	13.5	13.0	7.0	5.5	4.5	3.5	---	---	5.0	4.0
13	19.0	18.0	13.5	12.5	5.5	4.5	4.0	3.5	---	---	5.0	4.0
14	19.5	18.5	12.5	11.0	5.0	4.5	5.0	4.0	---	---	7.0	3.5
15	18.5	16.5	11.0	8.0	4.5	4.5	5.0	3.5	---	---	8.0	---
16	16.5	14.5	8.0	7.5	4.5	4.0	3.5	3.0	---	---	7.0	5.5
17	14.5	14.0	7.5	7.0	5.0	4.5	3.5	2.5	---	---	5.5	4.5
18	14.5	13.5	8.0	7.5	5.0	4.5	2.5	1.5	---	---	5.0	4.0
19	14.5	14.0	8.5	8.0	6.0	4.5	2.0	1.5	---	---	6.0	5.0
20	15.0	14.0	9.0	8.5	5.5	4.5	2.5	2.0	---	---	5.5	4.5
21	16.0	15.0	9.0	8.0	5.0	4.5	3.0	2.0	---	---	6.0	4.0
22	16.5	16.0	8.0	7.0	6.0	4.5	3.5	2.5	---	---	6.0	4.5
23	16.0	15.0	7.0	4.0	6.0	5.0	4.0	3.5	---	---	5.5	4.5
24	16.0	15.5	5.0	3.0	5.5	4.0	4.0	3.0	---	---	5.5	4.5
25	16.0	15.0	3.5	3.0	4.0	3.0	4.5	3.5	---	---	5.0	4.0
26	16.0	15.5	4.5	3.0	3.0	2.5	4.5	2.5	---	---	6.5	4.5
27	15.5	14.5	6.0	4.5	2.5	2.5	2.5	0.5	---	---	7.5	5.0
28	15.5	15.0	7.5	6.0	3.0	2.5	1.0	0.5	---	---	8.5	7.0
29	15.0	15.0	8.0	7.5	3.5	2.5	1.0	0.5	---	---	8.0	7.0
30	15.5	15.0	8.5	7.0	4.0	3.0	2.0	1.0	---	---	8.0	6.5
31	15.5	15.0	---	---	4.0	3.5	1.0	0.5	---	---	9.0	6.5
MONTH	21.0	13.5	15.0	3.0	9.5	2.5	5.0	0.5	---	---	9.0	2.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.5	12.5	11.0	21.0	15.0	27.5	26.0	22.5	20.0	24.0	23.0
2	9.5	8.5	11.5	11.0	21.5	19.5	27.0	25.5	23.5	21.0	24.5	23.0
3	8.5	7.5	13.5	11.0	23.0	20.5	26.0	24.0	23.5	22.5	24.5	23.0
4	7.5	6.5	14.0	11.0	24.5	22.0	25.5	23.5	23.0	22.0	25.0	23.5
5	7.5	7.0	14.5	12.5	24.5	23.0	26.0	24.0	23.0	20.5	25.0	23.0
6	8.5	7.0	14.0	12.0	24.0	22.5	26.5	24.5	23.5	21.0	25.5	23.5
7	9.5	7.5	14.0	12.5	24.0	22.5	27.0	24.0	24.0	21.5	25.0	23.0
8	10.5	8.5	15.0	13.5	22.5	20.0	26.5	25.0	24.5	22.0	25.5	23.5
9	12.0	10.0	15.5	13.5	21.0	19.5	27.0	25.0	25.0	22.5	25.0	23.5
10	12.0	10.0	17.0	14.5	22.5	19.0	26.5	25.0	25.5	24.0	24.0	22.0
11	12.0	9.5	17.0	15.0	22.0	20.5	25.5	21.5	25.5	24.0	24.0	23.0
12	14.0	11.0	16.5	14.5	23.0	21.5	25.0	22.5	24.5	22.5	23.5	22.5
13	14.5	13.0	14.5	13.0	25.0	22.0	24.5	23.0	24.0	22.0	22.5	19.5
14	12.5	11.0	16.5	13.5	24.5	23.0	24.5	22.5	24.0	22.0	21.5	19.0
15	12.5	11.0	17.0	15.0	23.0	22.0	24.0	22.0	24.5	23.5	22.5	21.0
16	14.0	11.0	17.5	16.0	23.0	20.5	24.5	21.5	24.5	22.5	22.0	20.5
17	13.0	12.0	18.5	16.0	24.0	21.0	24.5	23.0	24.0	21.5	20.5	20.0
18	15.5	12.0	21.0	17.5	25.0	22.0	24.0	21.5	23.5	21.5	21.0	20.0
19	15.5	12.5	22.0	19.5	26.0	23.0	23.5	21.5	24.0	22.0	20.5	19.5
20	16.0	12.5	21.5	19.5	27.0	24.0	23.0	21.0	24.5	23.0	20.5	19.0
21	15.5	13.5	20.5	19.0	24.0	21.0	23.0	21.0	25.5	24.0	20.0	19.0
22	13.5	11.0	19.0	17.0	23.5	22.0	24.5	21.5	25.5	23.0	19.5	18.0
23	13.0	10.0	19.0	16.5	---	---	24.5	22.5	25.0	22.5	19.5	18.5
24	12.5	10.5	19.0	17.0	---	---	24.0	21.0	23.0	21.0	19.5	18.5
25	12.0	10.0	17.0	16.0	26.0	25.0	23.5	20.5	22.5	21.0	19.0	17.0
26	12.0	11.0	16.5	14.5	25.0	24.5	23.5	23.0	24.0	22.0	18.0	17.5
27	11.0	10.0	15.0	14.0	26.5	23.5	23.0	21.5	23.5	21.5	18.5	18.0
28	13.0	10.5	17.0	14.0	28.5	25.5	23.0	21.0	22.5	22.0	21.0	18.5
29	12.5	11.0	18.5	15.5	28.5	23.5	24.5	22.0	24.0	22.0	22.0	21.0
30	13.5	11.0	19.5	16.5	28.0	26.0	23.5	21.0	24.5	23.0	22.0	22.0
31	---	---	20.5	18.0	---	---	22.0	20.0	24.5	23.5	---	---
MONTH	16.0	6.5	22.0	11.0	28.5	19.0	27.5	20.0	25.5	20.0	25.5	17.0
YEAR	28.5	0.5										

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	420	78	88	640	63	109	1410	53	202
2	379	49	50	1010	105	373	1250	36	122
3	393	48	51	2880	225	1960	1220	26	86
4	310	80	67	1290	74	258	2140	119	713
5	266	42	30	902	55	134	1810	58	283
6	375	83	84	682	42	77	1220	73	240
7	298	45	36	620	28	47	1040	37	104
8	266	43	31	565	25	38	1040	36	101
9	248	52	35	510	49	67	924	14	35
10	273	30	22	495	34	45	1120	21	68
11	266	48	34	447	54	65	3410	678	8670
12	276	38	29	424	23	26	3600	327	3570
13	3340	224	2240	424	26	30	2250	137	832
14	2320	168	1280	500	55	79	1670	84	379
15	1920	215	1210	2920	359	3060	1530	46	190
16	1190	74	238	2440	289	1900	2070	152	850
17	847	47	107	1770	134	640	1750	59	279
18	710	62	119	1330	69	248	1500	98	397
19	635	65	111	1190	43	138	1270	42	144
20	600	74	120	1200	57	185	1110	25	75
21	620	78	131	1200	38	123	1280	37	128
22	743	58	116	1020	66	182	1290	60	209
23	580	118	185	875	41	97	1120	33	100
24	490	46	61	710	23	44	919	24	60
25	411	32	36	605	26	42	875	18	43
26	379	16	16	560	33	50	842	18	41
27	358	17	16	704	49	93	803	13	28
28	334	23	21	919	58	144	776	50	105
29	362	17	17	1190	101	437	700	33	62
30	820	79	189	1790	133	732	700	36	68
31	858	72	167	--	--	--	650	46	81
TOTAL	21287	--	6937	31812	--	11423	43289	--	18265

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	650	28	49	283	43	33	2780	223	1670
2	600	28	45	330	106	94	2560	234	1620
3	600	18	29	298	50	40	2310	72	449
4	2400	513	3320	283	22	17	1940	60	314
5	2130	165	1130	2750	861	8720	1660	119	533
6	1350	76	277	2260	490	3230	1720	198	920
7	858	62	144	1440	183	712	2750	364	2700
8	787	27	57	1050	209	593	1990	59	317
9	803	38	82	770	129	268	1630	82	361
10	759	27	55	809	34	74	1490	90	362
11	704	35	67	754	41	83	1520	95	390
12	620	62	104	1000	70	189	1470	90	357
13	535	41	59	1160	62	194	2280	308	1900
14	891	164	427	919	44	109	2480	318	2130
15	765	190	392	820	30	66	2220	202	1210
16	560	68	103	754	37	75	2120	113	647
17	500	66	89	908	100	302	1890	66	337
18	415	53	59	1620	280	1220	1830	78	385
19	406	33	36	4620	805	10000	1880	142	721
20	370	37	37	6590	412	7330	1970	96	511
21	346	37	35	5170	305	4260	1810	83	406
22	370	36	36	4410	635	7560	1880	76	386
23	358	36	35	6610	868	15500	1630	38	167
24	330	43	38	4800	294	3810	1500	41	166
25	338	74	68	3770	282	2870	1390	62	233
26	420	56	64	3730	344	3460	1360	45	165
27	366	37	37	4150	176	1970	1310	50	177
28	358	33	32	3410	171	1570	1260	48	163
29	354	34	32	--	--	--	1140	39	120
30	314	29	25	--	--	--	1060	47	135
31	287	18	14	--	--	--	1010	44	120
TOTAL	20544	--	6977	65468	--	74349	55840	--	20072

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	980	43	114	322	12	10	314	18	15
2	1070	24	69	307	11	9.1	303	28	23
3	980	12	32	307	36	30	390	57	60
4	880	32	76	296	18	14	342	23	21
5	830	37	83	303	16	13	330	12	11
6	810	23	50	1530	714	3810	498	100	134
7	765	36	74	1140	282	868	557	308	868
8	720	43	84	1360	107	393	1150	1590	5310
9	700	40	76	1010	40	109	770	194	403
10	710	29	56	770	65	135	543	70	103
11	600	13	21	645	65	113	370	45	45
12	552	23	34	1000	129	395	303	26	21
13	615	39	65	925	54	135	275	18	13
14	960	97	251	740	39	78	240	33	21
15	715	34	66	585	33	52	247	36	24
16	630	22	37	543	17	25	233	13	8.2
17	625	28	47	690	14	26	216	11	6.4
18	600	42	68	561	45	68	216	12	7.0
19	557	26	39	462	28	35	195	13	6.8
20	539	27	39	426	28	32	205	17	12
21	453	15	18	358	18	17	2550	1190	8990
22	354	17	16	303	9	7.4	1080	408	1190
23	362	18	18	268	12	8.7	600	212	343
24	342	23	21	310	31	49	370	64	64
25	326	18	16	1830	791	4260	300	43	35
26	314	26	22	905	134	327	282	26	20
27	322	23	20	595	99	159	265	64	46
28	358	12	12	516	33	46	240	42	27
29	358	16	15	462	28	35	534	346	595
30	358	17	16	395	26	28	503	497	675
31	--	--	--	338	12	11	--	--	--
TOTAL	18385	--	1555	20202	--	11298.2	14421	--	19097.4

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	449	122	148	169	66	30	212	8	4.6
2	307	38	31	195	62	33	192	9	4.7
3	258	22	15	237	49	31	226	9	5.5
4	205	11	6.1	226	30	18	212	88	84
5	175	10	4.7	219	22	13	275	97	76
6	175	13	6.1	216	38	22	209	71	40
7	179	10	4.8	209	29	16	192	71	37
8	185	7	3.5	195	13	6.8	160	30	13
9	189	13	6.6	185	18	9.0	154	7	2.9
10	192	8	4.1	209	20	11	148	10	4.0
11	516	139	230	247	20	13	145	7	2.7
12	408	50	62	216	20	12	139	14	5.3
13	258	21	15	195	10	5.3	1420	856	6430
14	216	15	8.7	145	12	4.7	1390	501	2490
15	198	14	7.5	157	14	5.9	561	83	126
16	307	18	15	157	34	14	390	27	28
17	230	14	8.7	175	20	9.5	390	12	13
18	182	13	6.4	166	7	3.1	318	17	15
19	251	83	77	166	9	4.0	303	22	18
20	650	321	680	189	11	5.6	685	380	1200
21	254	134	92	185	18	9.0	860	209	553
22	219	68	40	293	15	12	462	188	235
23	202	32	17	279	27	20	366	62	61
24	870	390	1620	189	14	7.1	326	23	20
25	690	145	310	169	9	4.1	310	13	11
26	326	35	31	169	13	5.9	358	27	26
27	266	23	18	338	43	39	760	999	3230
28	230	18	11	362	31	30	543	476	806
29	219	17	10	350	16	15	358	50	48
30	202	13	7.1	293	10	7.9	458	354	454
31	192	16	8.3	265	11	7.9	--	--	--
TOTAL	9220	--	3504.6	6765	--	424.8	12522	--	16043.7

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	319755
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	189946.7

See page 312 for particle-size distribution of suspended sediment.

04208505 CUYAHOGA RIVER AT DUPONT INTAKE IN CLEVELAND, OHIO

LOCATION.--Lat 41°28'39", long 81°40'13", Cuyahoga County, at Dupont Products Division water intake on east side of turning basin at station 722, and 5.1 miles upstream from mouth, in Cleveland.

DRAINAGE AREA.--794 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1964 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 3,020 micromhos Feb. 5; minimum, 450 micromhos Dec. 13.

Period of record:
Specific conductance: Maximum, 3,020 micromhos Feb. 5, 1971; minimum, 290 micromhos July 20, 21, 1969.

REMARKS.--Continuous conductance recorder operated since October 1964 and is located in brick building at edge of turning basin. Interruptions in the record were due to malfunctions of the instrument.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1030	870	930	810	700	600	1210	1140	1550	1410	560	510
2	1080	1020	1060	610	820	670	1150	1110	1550	1400	590	540
3	---	---	690	540	880	760	1290	1110	1480	1390	610	540
4	---	---	750	590	890	710	1250	840	1610	1360	940	800
5	1090	990	770	730	720	650	840	620	3020	1300	1150	900
6	1130	1010	830	750	780	690	760	700	1300	940	1180	1060
7	1110	930	840	810	760	660	810	740	970	870	1150	810
8	1350	1090	860	790	940	760	890	790	900	840	860	750
9	1380	1330	850	780	1040	920	940	810	1030	980	1070	780
10	---	---	890	810	1000	860	850	810	1100	1000	1300	1070
11	---	---	1000	860	1220	860	880	780	1300	1060	1220	1030
12	1260	1140	1060	940	1230	490	920	780	1700	1300	1120	1040
13	1150	520	1100	1050	530	450	990	900	1720	1500	1080	960
14	700	520	1060	990	610	530	1300	930	1590	1330	---	---
15	660	590	---	---	720	600	1310	1130	1420	1300	760	620
16	700	570	530	470	800	680	1130	930	1390	1270	760	720
17	---	---	600	520	910	680	1050	930	1620	1260	850	720
18	---	---	660	560	710	590	1190	1010	1630	1200	790	700
19	930	860	820	600	710	600	1260	1170	1210	630	800	660
20	960	890	840	740	750	670	1340	1190	630	490	910	760
21	1090	940	780	720	760	710	1380	1320	500	460	960	900
22	1050	920	740	640	850	740	1520	1320	600	480	930	830
23	990	920	880	740	890	770	1640	1500	500	470	900	750
24	970	940	960	860	860	770	1690	1590	620	490	1180	900
25	1030	930	940	860	800	780	1600	1480	710	600	1230	1150
26	1080	950	960	900	830	780	1490	1410	670	570	1160	980
27	1120	1040	---	---	1010	810	1490	1430	600	530	990	880
28	1120	1050	---	---	1200	1000	1540	1470	530	510	930	800
29	1140	1100	---	---	1220	1060	1560	1480	---	---	830	770
30	1130	960	660	620	1260	1160	1610	1530	---	---	820	780
31	1100	860	---	---	1250	1190	1630	1540	---	---	870	780
MONTH	1380	520	1100	470	1260	450	1690	620	3020	460	1300	510

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	900	830	1350	1230	---	---	1100	1010	---	---	---	---
2	890	840	1350	1240	---	---	1160	1040	1200	1180	1290	1240
3	940	820	1260	1200	---	---	1200	1140	1360	1200	1370	1270
4	860	810	1280	1200	---	---	---	---	1430	1330	1370	1230
5	940	860	1240	1160	---	---	---	---	1410	1360	1240	820
6	990	880	1230	860	---	---	1240	1190	1430	1370	1140	930
7	980	870	900	840	---	---	1300	1190	---	---	1170	1090
8	970	890	920	860	880	800	1360	1280	---	---	1160	1040
9	1000	900	910	800	920	840	1400	1310	1440	1410	1350	1160
10	1010	900	930	820	1100	920	1400	1380	1410	1270	1370	1310
11	1070	900	980	860	1180	1080	---	---	1270	1200	1430	1360
12	1020	940	1030	880	1300	1150	1090	790	1250	1190	1450	1260
13	1220	950	1030	870	1300	1160	1210	1090	1360	1250	1370	610
14	1020	850	970	840	1300	1200	1140	1060	1330	1280	810	670
15	980	880	970	880	---	---	1240	1110	---	---	980	780
16	960	870	1000	920	---	---	1320	1160	---	---	1170	970
17	940	860	1120	950	1370	1320	---	---	1350	1280	1230	1070
18	900	880	1050	910	1420	1360	---	---	1380	1280	1300	1120
19	1000	900	1040	910	1420	1380	1320	1040	1370	1280	1240	1170
20	1090	970	1110	990	---	---	1110	940	1330	1280	1240	820
21	1080	990	---	---	720	590	1100	990	1300	1250	1110	780
22	1100	990	---	---	870	650	1090	1080	---	---	1000	900
23	1160	1050	---	---	870	750	1170	1090	1360	1200	1100	910
24	1220	1150	---	---	1110	870	---	---	---	---	1140	1070
25	1300	1200	---	---	1240	1110	---	---	---	---	1190	1130
26	1360	1230	---	---	1230	1160	---	---	---	---	1180	1100
27	1280	1200	---	---	1240	1190	1110	510	---	---	1130	540
28	1270	1200	---	---	1290	1180	1260	1010	---	---	890	590
29	1320	1160	---	---	1280	1240	1270	1220	---	---	1100	890
30	1360	1290	---	---	---	---	1330	1240	---	---	1270	1090
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	1360	810	---	---	---	---	---	---	---	---	1450	540

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OHIO

LOCATION.--Lat 41°29'17", long 81°41'07", Cuyahoga County, at bridge on West Third Street in Cleveland, 3 miles upstream from mouth, and 1.2 miles downstream from turning basin. Monitor located on left bank just upstream from bridge.

DRAINAGE AREA.--798 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1966 to September 1971.
Water temperatures: November 1966 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 2,840 micromhos Feb. 5; minimum, 460 micromhos Dec. 13.
pH: Maximum, 8.0 Oct. 15; minimum, 6.3 Apr. 22.
Dissolved oxygen: Maximum, 12.7 mg/l Jan. 6, 7; minimum, 0.0 mg/l on many days during April to July and September.
Water temperatures: Maximum, 32.5°C July 10; minimum, 2.5°C Feb. 6, 21, 23.

Period of record:
Specific conductance (1967-71): Maximum, 2,840 micromhos Feb. 5, 1971; minimum, 420 micromhos Feb. 2, 6, 1968, Jan. 31, 1969.
pH (1968-71): Maximum, 9.3 Sept. 14, 1969; minimum, 4.3 May 16, 1969.
Dissolved oxygen (1967-68, 1970-71): Maximum, 12.7 mg/l Jan. 6, 7, 1971; minimum, 0.0 mg/l on many days during 1967, 1968 and 1971.
Water temperatures: Maximum, 35.0°C July 24, 1967; minimum, 1.0°C Jan. 1, 1969.

REMARKS.--Continuous water-quality recorder operated since November 1966. Minimum recorded specific conductance value of 400 micromhos occurred May 12, 1967. Maximum recorded dissolved oxygen concentrations of 15.0 mg/l occurred on several days during 1968 and 1970. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.												
09...	0500	106	0	170	190	2.3	48	.84	730	280	1160	--
14...	1500	--	--	--	--	--	--	--	--	--	--	8.0
15...	0800	108	0	96	49	1.1	13	.72	344	180	537	--
NOV.												
13...	0820	105	0	180	150	2.8	51	.67	676	280	1070	--
30...	0510	101	0	120	77	1.0	22	1.3	422	210	680	--
DEC.												
14...	1610	86	0	94	72	.8	16	.55	400	190	592	--
31...	1010	94	0	150	190	1.7	43	1.0	688	270	1170	--
JAN.												
12...	0930	100	0	110	110	1.4	37	.28	472	220	845	--
30...	1645	109	0	160	280	2.5	140	.22	920	300	1590	--
FEB.												
13...	1500	80	0	110	330	1.1	35	.70	868	210	1510	--
23...	1145	69	0	57	69	.5	19	.81	330	150	533	--
MAR.												
01...	1340	74	0	78	73	.6	14	.34	328	150	548	--
10...	1030	81	0	120	250	1.1	29	.79	706	210	1190	--
APR.												
07...	1300	93	0	140	130	1.4	36	.52	560	240	930	--
28...	1130	110	0	160	140	1.7	52	.33	740	280	1210	--
MAY												
04...	1130	107	0	170	190	2.2	47	1.3	706	320	1220	--
26...	1130	118	0	110	98	1.0	15	2.1	438	220	797	--
JUNE												
02...	1215	--	--	--	--	--	--	--	--	--	--	27
05...	1500	118	0	160	220	2.1	40	1.1	784	300	1320	--
08...	1130	114	0	170	85	1.2	30	2.8	540	280	841	--
JULY												
09...	1012	110	0	150	270	2.7	59	3.4	690	290	1290	--
11...	1400	92	0	110	120	.8	19	1.9	422	210	762	--
AUG.												
07...	1730	124	0	170	120	2.0	61	2.2	860	300	1430	--
25...	1630	114	0	160	200	1.9	53	2.9	800	290	1240	--
SEP.												
01...	1230	120	0	150	200	1.7	53	3.3	684	300	1220	--
21...	1845	100	0	120	120	1.1	20	1.5	466	210	847	--

DATE	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED SILVER (AG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.												
14...	10	0	0	2	0	660	1	.0	3	0	18	0
JUNE												
02...	0	--	--	--	--	--	--	1.5	--	--	--	--

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	970	860	920	826	706	633	1190	1080	1640	1520	561	491
2	1020	970	1030	606	615	---	1120	1070	1560	1470	572	509
3	1050	1020	647	545	---	---	1190	1050	1560	1440	610	508
4	1050	1000	718	589	777	---	1220	810	1460	1420	867	597
5	1050	990	779	718	636	554	768	594	2840	1340	1050	866
6	1040	970	856	776	651	615	717	666	1340	900	1110	975
7	980	840	905	845	696	651	777	717	921	840	1080	746
8	1100	870	894	849	906	696	852	765	867	816	834	738
9	1260	1100	889	871	1030	900	909	843	1040	849	1110	791
10	1250	1180	896	848	1020	860	849	804	1130	1030	1210	1110
11	1190	1100	959	881	940	860	861	777	1070	993	1140	1030
12	1110	1050	1040	957	970	490	879	780	1500	984	1150	1070
13	1090	560	1090	1030	530	460	951	864	1800	1500	1120	936
14	690	560	1120	1060	600	530	1280	930	1610	1350	936	735
15	696	519	1090	517	630	600	1290	1140	1430	1340	750	672
16	717	675	607	514	770	670	1140	957	1370	1310	765	717
17	789	717	661	607	870	760	1000	936	1500	1280	837	765
18	895	766	718	661	760	620	1170	1000	1680	1350	840	756
19	913	646	799	718	680	650	1210	1170	1350	686	786	723
20	934	884	875	773	790	680	1290	1220	686	557	978	756
21	1060	908	783	723	780	720	1360	1290	557	530	1040	969
22	1030	915	---	---	840	733	1400	1360	659	539	1030	879
23	990	912	820	763	855	780	1630	1390	647	503	930	849
24	962	935	1010	787	803	757	1720	1630	623	515	1220	918
25	967	943	946	859	780	727	1710	1580	683	590	1320	1210
26	990	966	909	687	823	720	1570	1480	668	542	1270	1090
27	1010	981	1370	856	880	727	1490	1430	605	554	1090	948
28	1050	1010	1400	1020	1090	857	1550	1460	572	503	1000	831
29	1080	1040	1020	754	1160	1010	1600	1550	---	---	882	843
30	1050	822	754	633	1170	1110	1610	1570	---	---	954	828
31	1060	920	---	---	1200	1160	1640	1560	---	---	873	825
MONTH	1260	519	1400	514	1200	460	1720	594	2840	503	1320	491

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1030	825	1330	1290	1090	1080	1130	945	1250	1240	1210	1170
2	926	834	1300	1240	1050	1080	1090	1050	1240	1210	1190	1170
3	1000	864	1240	1230	1160	1090	1160	1080	1250	1210	1280	1190
4	---	852	1240	1120	1290	1160	1160	1140	1350	1250	1330	1190
5	990	906	1140	1090	1340	1290	1200	1160	1360	1340	1230	1040
6	996	933	1130	762	1310	1160	1220	1200	1370	1350	1060	915
7	990	930	852	684	1160	969	1220	1200	1390	1360	1130	1020
8	968	921	753	681	969	744	1260	1220	1460	1370	1130	1040
9	996	936	741	654	801	744	1310	1260	1480	1440	1110	1030
10	1010	980	714	651	840	801	1350	1310	1450	1360	1240	1110
11	1050	912	804	714	900	840	1360	603	1360	1270	1280	1230
12	1050	999	924	804	1090	900	840	603	1270	1170	1330	1280
13	1140	992	945	861	1190	1090	1130	849	1240	1180	1330	573
14	1090	888	861	798	1190	1160	1130	1100	1280	1230	765	624
15	1010	981	---	---	1200	1170	1100	1080	1290	1280	837	678
16	996	968	---	---	1220	1200	1170	1100	1280	1260	969	837
17	1000	975	1030	999	1290	1220	1180	1130	1300	1270	1070	965
18	1000	969	1020	984	1340	1290	1290	1150	1320	1300	1170	1060
19	1020	966	987	936	1370	1340	1320	1160	1310	1280	1180	1140
20	1080	1020	1050	978	1390	1330	1180	942	1290	1270	1150	966
21	1100	1000	1130	1050	1380	636	1190	975	1280	1260	972	771
22	1140	1100	1170	1130	705	663	1160	1020	1310	1260	1000	915
23	1160	1120	1180	1170	807	705	1050	1030	1340	1300	975	909
24	1240	1160	1180	1070	900	807	1090	720	1330	1200	1070	975
25	1330	1240	1070	705	1040	900	955	645	1200	1140	1120	1070
26	1360	1300	819	738	1170	1040	882	819	1220	1160	1130	1110
27	1310	1260	849	816	1190	1140	939	876	1310	1200	1120	531
28	1260	1200	951	849	1180	1130	1010	939	1310	1220	723	513
29	1220	1190	1070	951	1270	1120	1160	1000	1310	1240	882	723
30	1290	1190	1090	1070	1130	921	1260	1160	1240	1140	1040	882
31	---	---	1090	1070	---	---	1280	1250	1210	1150	---	---
MONTH	1360	825	1330	651	1390	636	1360	603	1480	1140	1330	513
YEAR	2840	460										

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	7.0	7.0	6.8	7.0	6.7	7.0	6.9	7.0	6.9	7.1	6.9
2	7.0	6.9	6.9	6.7	7.0	6.8	7.0	6.9	6.9	6.7	7.2	6.8
3	7.0	6.9	7.0	6.8	7.0	6.8	7.3	7.0	7.0	6.6	7.3	7.0
4	7.1	7.0	7.0	6.8	7.6	6.9	7.3	7.0	7.0	6.7	7.1	6.7
5	7.2	7.1	7.0	6.7	7.1	6.9	7.3	6.9	7.4	6.7	7.3	6.9
6	7.2	6.9	6.9	6.7	7.3	7.0	6.9	6.7	6.9	6.7	7.2	7.0
7	7.1	7.0	6.9	6.6	7.1	6.9	6.8	6.6	7.2	6.7	7.1	6.5
8	7.2	7.1	6.9	6.8	7.0	6.9	6.8	6.7	7.2	6.7	7.1	7.0
9	7.2	7.1	7.0	6.8	7.0	6.8	6.7	6.6	7.2	6.7	7.1	6.8
10	7.3	7.2	7.0	6.7	7.1	6.9	7.0	6.7	7.2	6.4	7.5	6.9
11	7.2	7.2	6.9	6.8	7.0	6.7	7.1	6.9	6.9	6.4	7.2	6.7
12	7.2	7.2	7.0	6.9	7.1	6.7	7.1	6.7	7.2	6.8	7.0	6.8
13	7.3	7.1	6.9	6.9	7.1	7.0	6.8	6.6	7.3	7.1	7.2	7.0
14	7.2	6.7	7.0	6.9	7.1	6.9	6.8	6.6	7.2	6.9	7.3	7.1
15	8.0	7.0	7.1	7.0	7.0	6.8	6.9	6.6	7.4	6.9	7.3	7.1
16	7.4	7.2	7.3	7.0	7.1	6.8	6.9	6.5	7.0	6.9	7.3	7.0
17	7.2	7.0	7.3	7.0	7.0	6.9	7.0	6.8	7.0	6.8	7.2	6.7
18	7.2	6.9	7.1	6.8	7.1	6.8	7.1	6.9	7.1	6.8	7.2	6.5
19	7.2	6.9	7.0	6.9	7.1	6.9	7.0	6.8	7.3	6.9	7.3	7.1
20	7.2	6.9	7.1	6.9	7.1	6.9	6.9	6.8	7.1	7.0	7.2	6.8
21	7.1	6.9	7.0	6.9	7.1	6.9	7.0	6.9	7.0	6.8	7.2	6.9
22	7.0	6.8	7.1	6.9	7.0	6.8	7.1	6.9	7.1	6.9	7.2	6.9
23	7.1	6.9	7.2	7.1	7.0	6.8	7.1	6.9	7.1	6.9	7.0	6.8
24	7.1	6.8	7.2	6.9	7.0	6.8	7.2	7.0	7.0	6.8	7.0	6.6
25	7.1	6.9	7.0	6.9	7.2	6.9	7.1	7.0	7.0	6.8	7.2	6.9
26	7.1	7.0	6.9	6.7	7.2	7.0	7.1	6.9	7.0	6.8	7.2	6.8
27	7.2	7.0	7.0	6.7	7.2	7.1	7.1	6.9	7.2	7.0	7.0	6.9
28	7.1	7.0	7.1	6.8	7.2	6.9	7.0	6.8	7.2	7.0	7.2	6.7
29	7.0	7.0	7.0	6.8	7.2	7.0	6.9	6.7	---	---	7.1	6.9
30	7.0	6.9	7.0	6.7	7.0	6.7	7.0	6.7	---	---	7.0	6.9
31	7.0	6.6	---	---	7.1	6.7	7.0	6.8	---	---	7.0	7.0
MONTH	8.0	6.6	7.3	6.6	7.6	6.7	7.3	6.5	7.4	6.4	7.5	6.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.1	6.9	7.0	6.9	7.3	7.2	7.1	7.0	7.2	7.1	7.2	7.1
2	7.1	6.9	7.0	6.9	7.3	7.2	7.2	7.1	7.2	7.1	7.2	7.1
3	7.0	6.7	7.0	6.9	7.2	7.0	7.1	7.1	7.2	7.1	7.2	7.1
4	7.1	6.9	6.9	6.8	7.1	7.0	7.1	7.0	7.2	7.1	7.2	7.1
5	7.2	7.0	6.9	6.7	7.1	7.0	7.1	7.1	7.2	7.1	7.3	7.1
6	7.2	7.1	7.1	6.7	7.2	7.1	7.2	7.1	7.1	7.0	7.3	7.1
7	7.1	6.8	7.0	6.9	7.3	7.2	7.2	7.1	7.0	6.9	7.2	7.1
8	7.1	6.9	7.0	6.9	7.4	7.2	7.2	7.1	7.1	7.0	7.2	7.0
9	7.0	6.9	7.0	6.8	7.3	7.1	7.2	7.1	7.1	7.0	7.1	7.1
10	6.9	6.7	7.0	6.8	7.2	7.1	7.1	7.0	7.2	7.0	7.1	7.1
11	7.0	6.8	7.0	6.7	7.3	7.0	7.4	7.0	7.2	7.1	7.1	7.1
12	7.0	6.8	6.9	6.7	7.5	7.1	7.3	7.0	7.2	7.1	7.2	7.1
13	7.0	7.0	6.9	6.8	7.1	7.0	7.1	7.0	7.2	7.1	7.6	7.1
14	7.2	7.0	6.8	6.8	7.2	7.1	7.0	6.9	7.2	7.1	7.3	7.2
15	7.0	6.9	---	---	7.2	7.1	7.0	7.0	7.2	7.1	7.2	7.0
16	7.2	6.8	---	---	7.1	7.1	7.0	6.9	7.2	7.2	7.2	7.1
17	7.0	6.9	7.3	7.2	7.1	7.1	7.0	7.0	7.2	7.2	7.2	7.1
18	7.0	6.9	7.4	7.0	7.1	7.1	7.1	7.0	7.2	7.1	7.2	7.1
19	7.0	6.8	7.1	6.9	7.2	7.1	7.2	7.1	7.1	7.1	7.1	7.1
20	6.9	6.7	7.2	7.1	7.2	7.1	7.1	7.0	7.2	7.1	7.2	7.1
21	6.9	6.8	7.3	7.2	7.4	7.1	7.1	7.0	7.2	7.1	7.2	7.1
22	6.9	6.3	7.2	7.1	7.3	7.1	7.1	6.9	7.2	7.1	7.2	7.0
23	6.9	6.8	7.1	7.0	7.2	7.0	7.0	6.9	7.3	7.2	7.1	7.0
24	7.0	6.9	7.2	7.1	7.1	7.0	7.1	6.9	7.4	7.3	7.2	7.1
25	7.0	6.8	7.6	7.1	7.1	7.0	7.2	7.0	7.3	7.2	7.2	7.1
26	7.1	6.9	7.7	7.3	7.2	7.1	7.1	7.0	7.2	7.2	7.1	7.1
27	7.0	7.0	7.4	7.3	7.2	7.0	7.1	7.0	7.3	7.2	7.4	7.1
28	7.0	6.8	7.4	7.2	7.1	7.0	7.1	7.0	7.2	7.2	7.3	7.0
29	6.9	6.8	7.3	7.2	7.2	7.0	7.1	7.0	7.2	7.1	7.1	6.9
30	7.0	6.7	7.2	7.1	7.1	6.9	7.1	7.1	7.2	7.1	7.1	7.0
31	---	---	7.2	7.1	---	---	7.2	7.1	7.2	7.1	---	---
MONTH	7.2	6.3	7.7	6.7	7.5	6.9	7.4	6.9	7.4	6.9	7.6	6.9
YEAR	8.0	6.3										

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	0.5	0.2	4.8	3.0	9.5	8.5	9.3	9.1	9.4	9.1	11.0	10.7
2	0.6	0.5	6.6	3.2	9.0	8.5	9.4	9.0	9.8	9.4	10.7	10.2
3	0.7	0.6	6.9	5.9	8.6	7.2	9.7	9.0	9.7	9.1	10.2	10.0
4	0.8	0.7	6.9	5.7	9.3	8.1	11.5	9.5	9.3	8.5	10.3	10.0
5	0.9	0.8	5.7	4.2	10.2	9.1	12.5	11.5	11.0	8.2	10.1	9.7
6	2.0	0.9	6.7	4.0	10.7	10.0	12.7	12.3	11.7	11.0	9.9	9.3
7	2.6	1.8	6.6	5.2	10.7	10.6	12.7	11.6	11.6	11.3	9.9	9.3
8	2.7	1.4	5.9	5.3	10.6	9.9	12.1	10.9	11.3	10.6	10.5	9.9
9	1.8	0.7	5.7	3.8	10.2	9.6	11.4	10.4	11.0	10.6	10.6	10.0
10	1.5	0.9	5.6	4.3	10.1	9.4	11.2	10.5	11.1	9.6	10.4	10.0
11	1.2	0.9	5.2	4.3	9.6	9.0	11.1	9.7	10.4	9.5	10.0	9.6
12	1.8	1.1	4.5	3.6	10.3	9.0	9.7	4.4	10.5	9.5	9.6	9.3
13	2.5	1.3	3.9	3.7	11.0	10.1	8.5	8.0	10.7	9.5	9.9	9.3
14	8.2	2.5	4.4	3.7	11.5	11.0	8.3	7.8	11.2	10.5	10.2	9.7
15	8.5	4.7	9.1	4.4	12.0	10.9	8.6	8.0	11.3	10.7	9.7	9.3
16	6.4	5.8	9.8	9.1	11.8	10.6	8.7	8.1	10.9	9.8	9.7	9.6
17	6.4	5.9	10.2	9.7	10.9	10.0	8.8	8.6	9.8	9.1	9.9	9.6
18	6.3	5.4	10.1	8.9	11.0	8.3	8.7	8.3	10.2	9.4	9.7	9.2
19	5.9	5.3	9.0	6.9	10.2	9.1	8.5	8.3	11.1	10.2	9.5	9.3
20	5.5	3.8	8.3	7.4	10.1	9.6	8.8	8.5	11.3	11.0	9.4	9.1
21	5.1	3.4	8.3	7.2	10.0	9.4	8.7	8.4	11.5	11.3	9.6	9.2
22	3.4	1.8	8.6	8.2	10.0	9.3	8.4	8.0	11.5	11.3	9.3	8.9
23	3.8	0.7	8.9	8.6	9.6	9.1	8.3	7.8	11.4	11.2	9.1	8.7
24	4.4	3.2	9.6	8.8	9.7	9.0	8.1	7.7	11.7	11.4	8.8	8.3
25	4.2	0.9	9.6	8.6	10.5	9.7	7.6	7.0	11.7	11.3	8.6	8.4
26	2.3	1.2	9.0	8.7	10.6	10.4	7.7	6.6	11.2	10.8	8.4	7.8
27	3.1	1.3	9.1	8.1	10.7	10.4	8.5	7.3	10.9	10.7	9.0	7.2
28	3.4	2.6	8.7	8.0	10.5	9.9	8.8	8.4	11.1	10.7	9.0	8.6
29	3.9	3.0	8.5	7.6	10.2	9.5	8.8	8.2	---	---	8.6	8.4
30	3.9	0.7	9.2	8.2	9.6	9.2	8.9	8.0	---	---	8.6	6.2
31	4.6	2.6	---	---	9.4	9.0	9.0	8.7	---	---	8.6	6.3
MONTH	8.5	0.2	10.2	3.0	12.0	7.2	12.7	4.4	11.7	8.2	11.0	6.2

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.7	6.4	0.9	0.0	0.5	0.0	0.3	0.2	0.1	0.1	0.5	0.1
2	8.1	6.5	0.7	0.0	0.1	0.0	0.4	0.0	0.1	0.1	0.1	0.0
3	7.9	6.5	0.7	0.0	0.1	0.0	0.4	0.0	0.2	0.1	0.1	0.0
4	7.7	5.6	0.2	0.0	0.1	0.0	0.2	0.0	0.1	0.1	0.6	0.1
5	---	5.9	0.3	0.0	0.2	0.0	0.1	0.0	0.6	0.1	0.4	0.3
6	8.2	7.7	2.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.5	0.3
7	7.9	7.4	3.6	1.0	0.2	0.0	0.1	0.0	0.3	0.1	0.9	0.3
8	7.8	6.0	3.7	2.1	0.1	0.0	0.0	0.0	0.2	0.1	0.4	0.2
9	6.8	5.2	2.5	0.2	0.9	0.0	0.6	0.0	0.2	0.1	0.3	0.3
10	5.8	2.7	0.5	0.1	1.2	0.4	0.2	0.2	0.2	0.1	0.4	0.2
11	4.3	3.2	0.1	0.0	1.1	0.1	2.0	0.2	0.2	0.1	0.2	0.2
12	3.8	3.4	0.3	0.0	0.1	0.1	3.9	0.6	0.2	0.1	0.2	0.2
13	3.6	2.5	0.5	0.0	0.2	0.0	1.1	0.3	0.6	0.1	1.7	0.2
14	6.2	1.9	0.2	0.0	0.1	0.0	0.5	0.1	0.2	0.1	2.4	0.7
15	6.3	3.3	---	---	0.3	0.0	0.2	0.1	0.4	0.1	2.1	0.5
16	5.9	3.3	---	---	0.3	0.0	0.2	0.1	0.4	0.1	1.1	0.8
17	4.4	2.0	1.2	0.0	0.1	0.0	0.2	0.1	0.5	0.1	1.2	0.7
18	2.8	0.3	1.9	0.4	0.1	0.0	0.2	0.1	0.2	0.1	1.1	0.4
19	3.2	1.9	1.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.4	0.3
20	3.2	0.0	0.1	0.0	0.1	0.0	0.2	0.1	0.3	0.1	1.4	0.3
21	0.2	0.0	0.1	0.0	1.2	0.0	0.2	0.1	0.2	0.1	3.1	0.1
22	1.6	0.0	0.2	0.0	1.3	0.3	0.5	0.1	0.2	0.1	2.9	2.0
23	1.1	0.3	0.3	0.0	1.3	0.1	0.2	0.1	0.2	0.1	2.6	1.4
24	1.0	0.2	0.3	0.0	0.4	0.0	1.5	0.1	0.3	0.1	2.3	1.1
25	0.6	0.0	3.1	0.0	0.1	0.0	1.3	0.2	0.4	0.1	1.8	1.2
26	0.9	0.2	2.9	1.0	0.1	0.0	1.4	0.6	0.8	0.1	2.0	0.6
27	0.7	0.3	2.9	1.7	0.1	0.0	0.8	0.1	0.2	0.1	4.4	1.3
28	1.4	0.7	2.8	1.0	0.2	0.1	0.9	0.1	0.2	0.1	4.3	2.3
29	1.6	1.0	1.7	0.6	0.2	0.1	0.1	0.1	0.2	0.1	3.4	0.9
30	1.4	0.0	1.3	0.1	0.6	0.2	0.1	0.1	0.2	0.1	1.1	0.3
31	---	---	1.0	0.0	---	---	0.2	0.1	0.2	0.1	---	---
MONTH	8.7	0.0	3.7	0.0	1.3	0.0	3.9	0.0	0.8	0.1	4.4	0.0
YEAR	12.7	0.0										

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	23.0	20.0	19.5	12.0	11.0	9.5	9.5	8.5	7.0	6.0	5.0
2	24.5	23.5	20.0	15.0	14.0	12.0	10.0	9.0	8.0	7.5	6.0	5.0
3	24.5	24.0	15.0	13.5	14.0	12.0	10.5	9.5	9.0	7.5	6.0	4.5
4	24.0	23.5	15.0	14.0	12.5	10.0	10.5	5.0	10.5	9.0	5.0	4.5
5	24.0	23.0	15.5	15.0	10.0	9.0	5.5	5.0	10.5	3.0	6.5	5.0
6	26.0	23.0	16.0	15.0	9.0	7.0	5.5	5.0	4.5	2.5	7.5	6.5
7	24.5	23.0	17.0	16.0	7.5	7.0	6.0	4.5	5.0	4.5	7.0	5.0
8	26.0	24.5	18.0	17.0	8.0	7.0	6.0	4.5	5.0	4.5	5.0	4.0
9	27.0	25.5	18.5	17.5	10.5	8.0	6.5	5.5	5.0	4.5	6.0	4.0
10	27.0	26.5	19.5	18.5	11.5	10.5	7.5	6.0	5.5	4.5	6.5	6.0
11	26.5	26.0	20.5	19.0	11.5	10.5	9.0	7.0	6.5	5.0	7.0	6.0
12	26.0	25.5	21.0	20.0	11.0	6.5	9.5	8.5	8.0	6.5	7.5	7.0
13	26.0	20.0	21.5	20.0	6.5	6.0	10.0	9.0	7.0	5.5	8.0	6.5
14	21.5	20.5	20.5	19.0	7.0	6.5	10.0	8.5	5.5	5.0	8.5	5.5
15	20.5	18.5	19.0	9.5	7.5	7.0	9.0	8.0	6.0	4.5	9.5	8.5
16	18.5	17.5	9.5	9.0	7.5	7.0	9.0	8.5	8.0	6.0	9.5	8.0
17	18.0	17.5	10.0	9.5	7.5	7.0	9.5	9.0	8.5	7.5	8.0	7.0
18	18.5	17.5	11.0	10.0	7.5	7.0	9.5	9.0	7.5	5.5	7.5	6.5
19	19.5	18.5	12.5	11.0	8.5	7.5	9.5	9.0	5.5	3.0	8.0	7.0
20	20.0	19.0	13.5	12.0	9.0	8.5	9.0	8.5	3.5	3.0	8.0	6.5
21	20.5	19.5	13.5	12.5	9.0	8.5	10.0	8.5	3.0	2.5	7.5	6.5
22	20.5	20.0	13.0	12.0	9.0	8.5	11.0	10.0	3.5	3.0	8.0	7.0
23	21.0	20.0	12.0	10.5	9.0	8.5	12.0	11.0	4.0	2.5	8.0	7.0
24	22.0	21.0	10.5	9.0	9.5	7.5	12.5	11.5	3.0	3.0	7.5	7.0
25	21.5	20.5	10.0	9.0	8.0	7.0	13.0	12.5	5.0	3.0	8.0	7.5
26	21.0	20.5	10.0	9.5	7.5	6.5	12.5	11.0	6.0	5.0	8.5	7.5
27	22.5	21.0	11.5	10.0	7.0	6.5	11.0	9.5	6.0	5.5	9.5	8.5
28	22.5	22.0	12.0	11.5	8.0	6.5	9.5	8.0	6.5	5.0	11.0	9.0
29	22.0	22.0	12.5	11.5	8.5	7.5	9.0	8.0	---	---	11.5	11.0
30	22.0	19.5	11.5	10.5	9.0	8.5	9.5	8.5	---	---	11.0	10.0
31	19.5	19.0	---	---	10.0	8.5	9.0	8.5	---	---	11.5	10.0
MONTH	27.0	17.5	21.5	9.0	14.0	6.0	13.0	4.5	10.5	2.5	11.5	4.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	11.0	20.5	19.5	25.5	24.0	30.0	29.5	29.5	28.5	29.0	28.0
2	---	---	21.0	20.0	26.0	25.0	30.5	29.0	29.0	26.0	29.0	28.5
3	---	---	21.0	20.0	26.5	25.5	31.0	30.0	26.0	25.5	30.0	29.0
4	---	---	21.0	20.5	27.5	26.0	31.5	30.0	26.5	25.5	29.5	28.0
5	---	---	22.5	21.0	29.0	27.5	31.5	30.5	27.0	26.5	28.5	27.5
6	---	---	22.5	15.5	29.5	28.5	31.5	31.0	27.5	26.5	28.5	27.0
7	---	---	17.5	16.0	29.0	28.0	31.5	31.0	28.0	27.0	29.0	28.5
8	---	---	19.0	17.5	28.0	23.0	32.0	31.5	28.5	27.5	29.5	29.0
9	---	---	19.5	17.5	23.5	23.0	32.0	31.5	29.5	28.5	30.0	29.0
10	---	---	21.0	19.5	25.0	23.0	32.5	31.5	30.0	28.5	30.5	30.0
11	---	---	22.5	20.5	25.5	24.0	32.0	21.5	29.5	29.0	30.5	30.0
12	---	---	22.5	20.5	28.0	25.5	26.0	22.5	29.5	29.0	30.5	30.0
13	---	---	20.5	18.5	28.0	27.0	27.5	25.0	29.5	29.0	30.0	19.5
14	---	---	19.0	18.5	28.5	27.5	29.0	27.0	30.0	29.0	21.5	19.5
15	---	---	---	---	29.0	28.0	29.5	28.5	30.0	29.5	23.5	21.5
16	17.0	16.5	---	---	29.0	28.0	29.5	28.5	30.0	29.0	24.5	23.5
17	18.0	17.0	22.5	22.0	28.5	28.5	29.5	28.5	29.5	29.0	25.0	24.5
18	18.0	17.0	23.5	22.0	29.0	28.5	29.5	28.5	30.0	29.0	25.0	24.5
19	19.5	17.0	25.5	23.5	30.5	28.5	30.0	28.0	30.0	29.0	25.5	24.5
20	21.5	19.5	26.5	25.5	31.5	30.0	28.0	25.0	30.0	29.5	25.5	22.5
21	21.0	20.0	26.5	25.5	31.0	22.0	27.0	24.5	30.5	29.5	22.5	21.0
22	20.5	19.5	26.0	25.0	25.5	22.0	29.5	26.5	31.0	30.0	22.5	21.5
23	20.5	20.0	26.0	25.0	26.0	24.5	29.5	28.5	30.0	28.0	23.5	22.5
24	20.0	19.0	25.5	24.5	27.5	26.0	30.0	22.5	28.5	27.5	24.0	23.0
25	19.5	18.5	24.5	18.0	29.0	27.5	24.5	22.5	29.0	28.0	24.0	23.5
26	20.0	19.0	19.0	18.5	30.5	29.0	26.5	24.5	29.0	28.5	23.5	23.0
27	20.0	19.0	19.5	19.0	31.5	29.5	28.0	26.5	29.5	29.0	23.5	19.5
28	19.0	18.5	20.0	19.5	31.0	30.0	28.5	27.5	29.0	27.5	22.5	19.5
29	18.5	18.0	22.0	20.0	31.5	29.5	29.0	28.5	28.0	27.0	24.0	22.0
30	19.5	18.5	25.0	22.0	30.0	29.0	29.5	29.0	27.5	26.5	26.0	24.0
31	---	---	25.0	23.0	---	---	29.5	29.5	28.5	27.5	---	---
MONTH	---	---	26.5	15.5	31.5	22.0	32.5	21.5	31.0	25.5	30.5	19.5
YEAR	32.5	2.5										

04209000 CHAGRIN RIVER AT WILLOUGHBY, OHIO

LOCATION.--Lat 41°37'51", long 81°24'13", in T.9 N., R.10 W., Lake County, 150 ft downstream from waterworks dam, 800 ft downstream from East Branch, 1 mile southeast of Willoughby, and 5 miles upstream from mouth. Sediment samples taken 450 ft upstream from waterworks dam.

DRAINAGE AREA.-- 246 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1964-71 (partial-record station).
Sediment records: July 1969 to September 1971.

REMARKS.--Chemical analyses for this station on page 374. Flow affected by ice Dec 27 to Jan. 4, 9, 10, Jan. 17 to Feb. 5, Feb. 9-11. Water is diverted from East Branch just upstream from station and at dam just downstream from station for municipal supply of city of Willoughby.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	358	26	27
3	--	--	--	1030	236	682	--	--	--
4	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	297	8	75
8	--	--	--	--	--	--	260	6	45
9	--	--	--	--	--	--	274	8	19
10	--	--	--	--	--	--	268	8	5.8
11	--	--	--	--	--	--	274	10	7.4
12	--	--	--	--	--	--	1510	690	5310
13	--	--	--	--	--	--	1800	453	2640
14	--	--	--	--	--	--	755	169	345
15	1470	300	1190	--	--	--	482	59	77
16	--	--	--	1320	187	717	386	20	21
17	--	--	--	--	--	--	841	68	154
18	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	180	13	6.3
30	--	--	--	--	--	--	170	13	6.0
31	--	--	--	--	--	--	160	13	5.6
TOTAL	--	--	--	--	--	--	--	--	--

04209000 CHAGRIN RIVER AT WILLOUGHBY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	160	13	5.6	--	--	--	--	--	--
2	150	13	5.3	--	--	--	514	56	78
3	150	13	5.3	--	--	--	--	--	--
4	--	--	--	100	10	2.7	--	--	--
5	--	--	--	900	292	842	--	--	--
6	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	481	59	77
10	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--
12	163	5	2.2	--	--	--	--	--	--
13	142	5	1.9	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	1050	187	530
17	--	--	--	303	8	6.5	--	--	--
18	--	--	--	616	41	74	--	--	--
19	--	--	--	2680	434	3610	--	--	--
20	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	652	76	134
23	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--
TOTAL	--	--	--	--	--	--	--	--	--

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	--	--	--	103	15	4.2
2	--	--	--	--	--	--	112	15	4.5
3	--	--	--	--	--	--	106	15	4.3
4	--	--	--	157	10	4.2	95	15	3.8
5	--	--	--	148	10	4.0	90	15	3.6
6	--	--	--	--	--	--	90	15	3.6
7	202	7	3.8	--	--	--	--	--	--
8	188	7	3.6	--	--	--	--	--	--
9	178	7	3.4	--	--	--	--	--	--
10	213	10	5.8	--	--	--	--	--	--
11	202	10	5.5	--	--	--	--	--	--
12	178	10	4.8	266	24	17	--	--	--
13	195	16	9.7	--	--	--	--	--	--
14	580	74	116	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--
24	--	--	--	136	34	19	--	--	--
25	154	3	1.2	1150	619	2000	--	--	--
26	145	3	1.2	443	240	305	--	--	--
27	142	3	1.2	230	70	43	--	--	--
28	426	780	1170	174	30	14	55	35	5.2
29	--	--	--	142	21	8.1	--	--	--
30	--	--	--	124	18	6.0	--	--	--
31	--	--	--	112	16	4.8	--	--	--
TOTAL	--	--	--	--	--	--	--	--	--

04209000 CHAGRIN RIVER AT WILLOUGHBY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	49	30	4.0	--	--	--
2	--	--	--	46	27	3.4	--	--	--
3	--	--	--	44	24	2.9	--	--	--
4	--	--	--	44	23	2.7	--	--	--
5	--	--	--	44	22	2.6	--	--	--
6	--	--	--	39	21	2.2	--	--	--
7	57	20	3.1	35	20	1.9	--	--	--
8	51	20	2.8	39	20	2.1	--	--	--
9	51	20	2.8	35	20	1.9	40	32	3.5
10	51	20	2.8	34	20	1.8	--	--	--
11	--	--	--	39	20	2.1	--	--	--
12	--	--	--	39	20	2.1	--	--	--
13	--	--	--	35	20	1.9	737	1210	4860
14	--	--	--	31	20	1.7	892	449	1490
15	--	--	--	32	20	1.7	187	94	47
16	48	49	6.4	32	20	1.7	--	--	--
17	51	49	6.7	31	20	1.7	--	--	--
18	51	49	6.7	29	20	1.6	--	--	--
19	49	49	6.5	27	20	1.5	--	--	--
20	106	52	15	--	--	--	--	--	--
21	--	--	--	40	35	3.8	339	209	209
22	--	--	--	40	20	2.2	--	--	--
23	--	--	--	--	--	--	--	--	--
24	209	174	174	--	--	--	--	--	--
25	302	380	359	--	--	--	--	--	--
26	109	99	29	--	--	--	--	--	--
27	78	50	11	--	--	--	--	--	--
28	62	42	7.0	--	--	--	--	--	--
29	53	39	5.6	--	--	--	--	--	--
30	51	36	5.0	--	--	--	--	--	--
31	51	33	4.5	48	17	2.2	--	--	--
TOTAL	--	--	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
						.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
DEC. 12,1970	1730	4.0	3030	1620	13300	28	41	51	67	84	92	98	100	--	--	--
FEB. 5, 1971	2030	2.0	1890	436	2230	51	62	76	88	95	99	100	--	--	--	--
APR. 28.....	0930	--	720	1620	3150	42	56	70	84	96	98	99	100	--	--	--
SEPT. 13....	1650	--	1240	2200	7370	33	45	60	79	95	98	100	--	--	--	--

04212200 GRAND RIVER AT PAINESVILLE, OHIO

LOCATION.--Lat 41°44'09", long 81°15'59", Lake County, at bridge on State Highway 535 in Painesville, 2.2 miles upstream from mouth, and 6 miles downstream from Kellogg Creek.

DRAINAGE AREA.--701 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1950 to February 1952, October 1962 to September 1971.
Water temperatures: March 1950 to February 1952, October 1962 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 27,800 micromhos Aug. 13; minimum, 300 micromhos Feb. 23-28, Mar. 1.
Water temperatures: Maximum, 33.5°C June 28; minimum, freezing point Jan. 4-8, Feb. 13, 14, 20-22, Mar. 4.

Period of record:
Specific conductance (1950-52, 1962-68, 1970-71): Maximum, 30,300 micromhos July 14, 1964; minimum, 300 micromhos Feb. 23-28, Mar.1, 1971.
pH (1969-70): Maximum, 11.9 Oct. 30, 1969; minimum, 5.3 Feb. 13, 1970.
Dissolved oxygen (1967-68, 1969-70): Maximum, 13.6 mg/l Jan. 29-31, 1970; minimum, 0.0 mg/l on several days during July and August 1968.
Water temperatures: Maximum, 33.5°C June 28, 1971; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since December 1966. Minimum recorded pH 4.5 occurred Aug. 14, 1967. Maximum recorded dissolved oxygen concentrations of 15.0 mg/l occurred on many days during water years 1968 and 1971. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice a year to further define the quality of water. Diamond Alkali Company and Painesville Sewage Disposal Plant are located just above station. Records of discharge are given for 04212000 Grand River near Madison, Ohio (drainage area 581 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)
OCT.												
07...	1200	740	--	--	--	--	--	--	--	--	--	--
15...	1225	3620	122	0	44	76	.3	5.6	334	180	80	479
23...	1900	433	90	0	120	2400	.3	3.8	4520	2400	2300	7120
NOV.												
13...	1700	1060	67	0	110	2300	.3	4.0	4310	2300	2200	6730
16...	1345	5840	84	0	40	52	.3	3.7	252	130	61	362
DEC.												
11...	1800	615	54	0	140	3300	.3	4.0	5310	3000	3000	8790
18...	1110	1920	58	0	51	120	.3	4.2	374	140	92	586
JAN.												
05...	1850	4160	46	0	34	67	.2	6.0	248	100	62	434
20...	1130	130	25	0	150	6000	.3	11	10200	5200	5200	14300
FEB.												
02...	1800	120	41	0	140	6500	.3	4.6	13900	7300	7300	19800
23...	1720	6660	42	0	32	63	.1	4.9	210	210	180	352
MAR.												
16...	2100	3340	36	0	34	88	.1	4.1	266	100	70	430
31...	1700	655	52	0	85	2000	.2	4.1	3800	1300	1200	5780
APR.												
02...	1830	483	72	0	54	370	.2	7.1	920	320	260	1400
13...	1330	223	87	0	130	3800	.3	2.9	6920	3400	3300	10000
MAY												
11...	1100	357	95	0	51	520	.2	7.3	1210	450	370	1850
28...	1800	292	[illegible]	0	93	5400	.4	5.2	9420	5100	5000	13700
JUNE												
08...	1655	245	72	0	68	540	.2	8.1	1290	350	290	1980
15...	2130	38	46	0	240	6900	.4	2.4	12100	6600	6500	16100
JULY												
09...	1750	15	73	0	45	990	.2	22	1830	580	520	2950
21...	1350	7.0	42	0	43	6500	.3	6.7	8530	4700	4700	13900
AUG.												
13...	1800	1.9	0	28	56	13000	.6	.2	1800	10000	9000	27700
24...	1840	.78	108	0	59	1600	.2	20	2540	1100	1000	4510
SEP.												
07...	1630	10	32	0	67	7400	.3	7.7	9520	5200	5200	15500
14...	1850	25	116	0	72	920	.6	2.8	1700	610	510	2950

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.										
07...	11	0	0	3	0	15	1	1.7	1000	20
JUNE										
02...	24	0	--	--	--	--	--	1.4	--	--

04212200 GRAND RIVER AT PAINESVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6300	5700	4400	2600	1300	700	9000	7200	6800	6100	600	300
2	6700	2700	3100	2500	1000	800	7800	1400	20300	6800	1800	600
3	2700	2400	3000	1100	1200	1000	1400	1200	20100	15800	1900	600
4	2600	2400	1300	1100	1200	600	1400	500	16500	5200	1200	700
5	11300	2300	1300	1100	900	600	500	400	5800	4400	1600	1200
6	11200	3600	1600	1300	1200	900	800	400	4400	1600	7900	1600
7	4000	3300	8700	1400	1700	1200	1100	800	1600	800	6400	2600
8	4100	3400	8500	7700	7400	1700	1500	1000	1900	800	2600	600
9	5200	1900	7700	2000	7700	1700	7300	1500	2800	1900	900	700
10	3100	1900	2300	1700	1900	1800	6700	5700	3500	2700	3900	900
11	3700	2400	2000	1800	8900	1900	6700	5000	3300	2700	3900	1500
12	4100	3100	2100	1600	8400	500	6800	2000	2800	2800	4000	1500
13	6500	2800	6800	1300	1000	500	2300	2000	2800	1700	3700	2700
14	2700	800	5700	3700	1300	1000	2400	1900	2200	1900	2700	1200
15	800	500	3700	800	3800	1300	2100	1700	2100	1900	1300	500
16	700	600	800	400	3800	3700	2700	1800	3700	1900	500	400
17	1100	700	500	400	3700	700	3600	2700	3600	1800	600	500
18	1700	1100	2600	500	700	600	3600	2600	3000	1700	2400	500
19	13900	1600	2600	2300	900	600	12200	3000	2200	900	2300	600
20	14200	2500	2400	900	1200	900	15400	12000	900	300	800	600
21	3400	2100	1100	800	1500	1200	12900	12000	400	400	800	700
22	12700	3400	1300	900	7700	1500	12000	6300	600	400	4000	700
23	9100	6700	1800	1200	7800	5600	7100	6000	500	300	3500	3100
24	7000	5600	2300	1800	5600	1200	6600	6000	300	300	3500	2900
25	6000	5400	3000	2200	1400	1100	13300	6500	300	300	2900	2600
26	6200	5500	3100	2700	1700	1400	13200	5000	900	300	2700	2500
27	6600	2600	5800	2200	2400	1700	5000	4600	700	300	2700	1200
28	3000	2500	2500	1400	2900	2300	5600	4200	300	300	1400	1100
29	3800	2800	1400	1000	8400	2800	7500	4800	---	---	1400	1100
30	14200	3000	1300	1100	9100	7200	6800	5200	---	---	1500	1300
31	11800	4400	---	---	9300	7400	6300	5900	---	---	6000	1400
MONTH	14200	500	8700	400	9300	500	15400	400	20300	300	7900	300

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5700	1500	8100	2500	9600	3300	6600	4200	10200	3700	17700	9600
2	1700	1200	2600	1900	13000	9400	6800	2600	8600	3400	13500	10400
3	1400	1100	3200	2100	11800	3900	10100	2200	13600	8400	11800	9600
4	1400	1100	4200	2900	5800	3100	12200	10000	13500	10900	11900	10200
5	10300	1400	4900	3800	10200	4600	11800	9900	11300	6100	---	---
6	9900	2700	24600	4500	19400	10200	10600	4500	11900	5800	---	---
7	2800	2200	18100	11700	15400	5400	4500	2800	15900	9800	16600	14000
8	13900	2300	12100	2400	5400	1400	3200	2600	10400	5500	16800	10100
9	9400	2500	2500	1600	2500	1700	7100	2900	5800	4000	11300	6300
10	2600	2200	8700	1700	2500	1800	16900	7100	7800	4800	7900	4400
11	2400	2100	2200	1800	14500	2000	17600	8400	8800	5600	8800	4300
12	10400	2200	7100	2100	15000	9300	15400	7600	15600	5300	10200	8500
13	10100	8300	3000	2300	10000	2800	14800	8600	27800	14400	14000	7500
14	9300	1700	13600	2800	12600	2600	---	---	22000	13200	9500	2300
15	---	---	12500	8100	17000	12400	---	---	13500	6600	7500	2800
16	8800	8300	8100	6800	17200	13000	---	---	10800	6200	7800	4500
17	8400	7300	7400	3800	14100	5400	---	---	19000	6600	6800	4400
18	7300	3600	4400	2400	11800	5200	---	---	18800	11200	14700	6000
19	3600	1800	6300	3000	17500	11600	---	---	15400	10500	13100	6200
20	4700	2000	5300	3000	12700	8600	---	---	12000	8100	14300	4000
21	4600	1400	12600	3200	11400	2300	14300	12100	8900	6100	16300	12300
22	2100	1500	8900	3400	12900	3000	12100	6300	6500	4600	18400	11400
23	7700	1600	4300	3300	15200	9500	13000	5200	4600	4200	20100	9600
24	7600	2600	16900	3600	10100	8300	19100	13000	11300	3700	15100	6200
25	3000	2500	16500	2200	9200	6800	16200	11900	20700	11000	17000	7300
26	2900	2500	3300	2400	6800	3000	12800	7600	12400	8500	19400	13600
27	12500	2600	15100	2900	12200	6500	16200	4400	22200	9600	14300	11400
28	11900	2300	15700	12700	12100	8200	16900	7100	19600	10600	12400	8200
29	5500	2300	12700	11000	8200	2900	9800	5600	11800	6600	8800	4700
30	7700	2300	11000	10100	4200	1100	12600	9800	11400	6300	5800	3700
31	---	---	10300	7100	---	---	12000	9100	18000	8400	---	---
MONTH	13900	1100	24600	1600	19400	1100	---	---	27800	3400	20100	2300
YEAR	27800	300										

04212200 GRAND RIVER AT PAINESVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.7	8.9	8.6	9.0	6.6	---	---	---	---	8.0	6.9
2	8.7	8.4	8.9	8.7	7.6	6.6	---	---	---	---	8.8	6.7
3	8.7	7.8	9.2	8.1	8.6	6.5	---	---	---	---	8.1	6.6
4	8.8	7.0	8.4	7.4	8.2	7.2	---	---	---	---	7.6	6.6
5	8.0	6.9	8.0	7.3	8.6	7.1	---	---	---	---	7.3	6.6
6	8.9	6.9	8.3	7.3	8.3	6.7	---	---	---	---	8.8	6.7
7	9.3	6.6	8.8	7.3	7.9	6.5	---	---	---	---	8.8	8.1
8	8.8	8.4	8.8	7.8	9.1	6.4	---	---	---	---	8.4	6.4
9	8.8	7.8	8.0	7.1	---	---	---	---	---	---	7.5	6.1
10	8.6	7.7	7.6	6.6	---	---	---	---	---	---	8.7	6.4
11	8.4	7.7	8.5	6.9	---	---	---	---	---	---	8.6	6.7
12	8.4	7.4	8.8	8.0	---	---	---	---	---	---	8.4	6.5
13	8.7	7.5	8.8	8.1	---	---	---	---	---	---	9.0	7.4
14	8.9	7.9	8.9	8.8	---	---	---	---	---	---	8.4	6.9
15	8.8	7.9	8.8	7.9	---	---	---	---	---	---	7.7	6.3
16	9.4	7.5	7.9	7.7	---	---	---	---	---	---	6.5	6.0
17	8.4	6.9	7.7	7.2	---	---	---	---	---	---	6.7	6.0
18	8.4	7.2	9.1	7.2	---	---	---	---	---	---	8.1	6.0
19	9.0	7.1	9.0	8.6	---	---	---	---	---	---	8.1	6.4
20	9.1	7.0	9.8	7.8	---	---	---	---	---	---	7.9	6.1
21	7.9	7.0	9.2	8.0	---	---	---	---	---	---	7.4	6.2
22	8.0	6.2	9.0	7.8	---	---	---	---	---	---	8.0	6.1
23	8.2	7.6	9.0	7.8	---	---	---	---	---	---	8.3	7.4
24	8.0	7.6	8.9	8.2	---	---	---	---	---	---	8.1	7.3
25	7.8	7.5	11.4	8.1	---	---	---	---	7.0	6.3	8.2	6.8
26	8.2	7.6	9.6	8.3	---	---	---	---	8.5	6.3	8.2	7.1
27	8.6	7.6	9.2	8.5	---	---	---	---	8.5	6.8	7.7	6.1
28	8.9	7.9	9.0	8.1	---	---	---	---	8.2	7.2	7.9	6.5
29	8.6	7.6	9.0	8.4	---	---	---	---	---	---	8.7	6.3
30	8.7	8.0	9.2	8.6	---	---	---	---	---	---	8.3	6.5
31	8.8	8.4	---	---	---	---	---	---	---	---	8.4	6.8
MONTH	9.4	6.2	11.4	6.6	---	---	---	---	---	---	9.0	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.3	6.9	8.5	8.3	7.9	7.6	8.3	7.9	---	---	7.6	7.3
2	8.1	6.7	8.6	8.5	7.6	7.4	8.4	7.6	---	---	7.5	7.3
3	7.8	6.8	8.6	8.4	7.6	7.4	8.3	8.0	---	---	7.4	7.1
4	8.1	6.9	8.4	8.3	8.4	7.5	8.4	7.5	---	---	7.3	7.1
5	8.2	7.2	8.4	8.3	8.8	8.3	8.0	7.6	---	---	---	---
6	9.1	7.7	8.4	8.1	8.8	7.6	8.0	7.5	---	---	---	---
7	8.1	7.1	8.2	8.1	8.4	7.6	8.0	7.5	---	---	7.1	6.9
8	7.9	7.3	8.6	8.2	8.4	7.6	7.7	7.5	---	---	7.4	6.9
9	8.0	7.4	8.6	8.5	7.6	7.5	7.6	7.5	---	---	7.2	6.9
10	7.8	7.1	8.6	8.3	7.6	7.5	7.8	7.5	---	---	7.3	6.9
11	7.9	7.6	8.6	8.5	7.8	7.5	7.8	7.5	---	---	7.1	6.9
12	7.9	7.3	8.6	7.9	7.9	7.6	7.8	7.6	---	---	7.2	7.0
13	7.5	6.8	8.4	8.2	8.0	7.7	7.8	7.6	---	---	7.5	7.0
14	7.0	7.0	8.4	7.7	7.9	7.6	---	---	---	---	7.9	7.5
15	---	---	7.9	7.7	7.9	7.6	---	---	---	---	7.9	7.1
16	8.5	8.4	7.9	7.8	7.6	7.4	---	---	---	---	7.3	7.0
17	8.6	8.4	8.1	7.8	7.8	7.5	---	---	---	---	10.6	6.9
18	8.8	8.6	8.2	7.8	7.8	7.5	---	---	---	---	7.6	6.9
19	8.9	8.7	8.1	7.9	7.6	7.2	---	---	---	---	7.3	6.8
20	8.8	8.5	8.0	7.9	7.2	7.0	---	---	---	---	11.3	7.1
21	8.6	8.5	8.0	7.6	7.7	7.1	---	---	---	---	10.2	7.2
22	8.6	8.5	8.3	7.7	7.9	7.1	---	---	---	---	7.2	7.0
23	8.5	8.3	7.9	7.8	9.7	7.6	---	---	---	---	8.2	6.9
24	8.5	8.3	8.0	7.8	9.5	8.2	---	---	---	---	7.7	6.9
25	8.5	8.4	8.3	7.8	8.4	8.1	---	---	---	---	9.3	6.9
26	8.5	8.4	8.3	8.1	8.4	7.8	---	---	---	---	9.9	6.9
27	8.4	8.2	8.3	7.9	8.2	7.9	---	---	---	---	7.1	6.8
28	8.5	8.2	8.0	7.7	8.0	7.8	---	---	---	---	7.6	6.8
29	8.6	8.4	7.8	7.7	8.0	7.8	---	---	---	---	7.7	7.2
30	8.5	8.3	7.9	7.7	8.2	7.9	---	---	---	---	11.5	7.2
31	---	---	7.9	7.7	---	---	---	---	---	---	---	---
MONTH	9.1	6.7	8.6	7.6	9.7	7.0	---	---	---	---	11.5	6.8

04212200 GRAND RIVER AT PAINESVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.7	8.2	10.0	9.7	12.9	12.3	13.9	13.0	12.8	12.4	---	---
2	8.2	7.7	9.9	9.8	12.4	12.2	14.0	12.7	12.6	5.0	---	---
3	7.9	7.5	---	---	12.5	12.0	14.0	13.3	8.9	7.2	---	---
4	8.2	7.8	---	---	13.0	12.0	15.0	13.2	8.9	8.6	---	---
5	8.4	8.0	---	---	13.1	12.9	15.0	13.8	10.1	8.6	---	---
6	9.0	8.1	10.4	10.1	13.7	13.0	15.0	15.0	10.8	10.1	---	---
7	8.8	8.5	10.7	10.1	13.8	13.7	15.0	13.9	11.3	10.8	---	---
8	8.6	8.0	10.9	10.5	13.9	13.6	15.0	13.7	11.3	11.1	---	---
9	8.0	7.5	10.6	10.0	13.7	13.1	14.0	13.4	11.4	11.1	---	---
10	7.9	7.4	10.0	9.5	13.2	13.1	13.4	12.9	11.4	11.1	---	---
11	7.9	7.4	10.2	9.5	13.4	13.1	13.2	12.5	11.5	11.2	---	---
12	7.9	7.2	10.2	9.6	13.9	13.2	12.7	12.3	11.4	11.1	---	---
13	8.9	7.5	10.7	9.9	14.0	13.8	13.8	12.4	11.8	11.2	---	---
14	9.3	8.8	11.1	10.7	14.0	13.8	13.5	12.9	12.3	11.8	---	---
15	9.7	9.3	11.9	11.1	13.8	13.7	13.7	13.2	12.8	12.2	---	---
16	10.1	9.7	12.3	11.9	13.7	13.4	13.6	13.0	13.7	12.6	---	---
17	10.2	9.9	12.5	12.3	13.7	13.5	13.6	12.9	13.4	13.1	---	---
18	10.1	9.9	12.3	12.1	13.9	13.6	12.9	12.6	14.1	13.2	---	---
19	10.0	9.7	12.2	12.0	13.7	13.4	13.0	12.6	---	---	---	---
20	9.9	9.6	12.0	11.3	13.5	13.4	13.5	12.7	---	---	---	---
21	9.6	9.3	12.0	11.3	13.5	13.1	13.3	12.9	---	---	---	---
22	9.5	9.0	11.8	11.6	13.5	13.3	13.7	12.9	---	---	---	---
23	9.8	9.5	12.6	11.6	13.5	12.9	14.4	13.3	---	---	---	---
24	9.7	9.5	12.9	12.6	13.7	12.9	13.8	13.2	---	---	---	---
25	9.5	9.3	13.1	12.3	14.8	13.5	13.8	13.3	---	---	---	---
26	9.3	8.8	12.4	12.1	14.3	13.5	14.0	13.1	---	---	---	---
27	9.3	8.6	13.5	12.2	13.6	13.4	13.6	12.8	---	---	---	---
28	9.4	8.8	13.5	13.3	13.8	13.5	13.2	12.9	---	---	---	---
29	9.4	8.7	13.5	12.9	14.1	13.5	13.5	13.1	---	---	---	---
30	9.6	8.7	13.9	12.9	13.6	13.3	13.1	12.3	---	---	---	---
31	9.8	9.6	---	---	13.6	13.0	12.5	12.2	---	---	---	---
MONTH	10.2	7.2	13.9	9.5	14.8	12.0	15.0	12.2	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	7.1	5.2	5.6	4.6
2	---	---	---	---	---	---	---	---	7.2	5.4	5.5	2.7
3	---	---	---	---	---	---	---	---	7.5	5.9	4.1	2.6
4	---	---	---	---	---	---	---	---	7.7	7.3	3.6	2.2
5	---	---	---	---	---	---	---	---	8.1	7.4	---	---
6	11.8	11.1	---	---	---	---	---	---	7.7	6.3	---	---
7	13.8	11.0	---	---	---	---	---	---	7.8	6.9	4.1	2.6
8	13.4	11.5	---	---	---	---	---	---	7.9	7.1	4.4	1.5
9	13.1	10.5	---	---	---	---	---	---	7.5	6.7	5.0	1.4
10	12.4	9.9	---	---	---	---	---	---	7.2	5.0	4.4	1.8
11	12.7	9.2	---	---	---	---	---	---	5.9	1.7	5.3	0.8
12	12.3	9.5	---	---	---	---	---	---	6.6	4.9	6.3	4.9
13	10.7	8.4	---	---	---	---	---	---	7.3	4.3	7.5	6.2
14	11.4	9.1	---	---	---	---	---	---	6.6	4.0	8.0	7.5
15	---	---	---	---	---	---	---	---	7.4	3.1	7.5	6.9
16	11.2	10.3	---	---	---	---	---	---	7.3	5.5	7.0	5.7
17	11.6	10.2	---	---	---	---	---	---	7.4	4.6	6.7	4.0
18	---	---	---	---	---	---	---	---	7.5	3.5	6.4	5.4
19	---	---	---	---	---	---	---	---	9.1	4.6	6.9	4.5
20	---	---	---	---	---	---	---	---	7.6	4.2	6.7	4.2
21	---	---	---	---	---	---	5.1	3.7	7.0	5.7	7.9	6.5
22	---	---	---	---	---	---	6.1	3.9	7.2	5.5	8.0	6.8
23	---	---	---	---	---	---	6.1	3.3	7.3	4.4	7.9	6.3
24	---	---	---	---	---	---	6.8	3.4	6.8	5.6	7.7	5.2
25	---	---	---	---	---	---	7.1	6.5	6.4	4.6	7.5	5.0
26	---	---	---	---	---	---	7.3	6.3	6.6	3.5	8.1	6.8
27	---	---	---	---	---	---	7.1	6.5	5.5	4.1	7.5	5.9
28	---	---	---	---	---	---	7.4	6.6	5.1	2.3	7.1	5.5
29	---	---	---	---	---	---	7.5	6.3	4.3	3.1	6.1	5.0
30	---	---	---	---	---	---	6.5	5.4	4.2	2.1	6.6	5.1
31	---	---	---	---	---	---	6.5	4.3	5.3	2.0	---	---
MONTH	---	---	---	---	---	---	---	---	9.1	1.7	8.1	0.8

04212200 GRAND RIVER AT PAINESVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	16.5	14.0	13.5	7.0	5.5	3.0	1.5	2.0	0.5	3.0	1.5
2	20.0	18.0	13.5	13.5	7.0	6.5	3.0	1.5	2.5	0.5	3.0	1.5
3	20.0	18.5	14.0	11.0	7.5	6.0	3.0	1.5	2.5	1.0	2.5	1.0
4	18.5	17.0	11.5	11.0	7.5	5.5	3.0	0.0	4.5	2.5	1.0	0.0
5	19.0	17.0	11.0	10.0	5.5	4.5	1.0	0.0	4.5	1.0	3.0	0.5
6	19.0	15.0	11.5	10.5	4.5	3.0	0.0	0.0	1.5	0.5	4.5	2.5
7	17.0	16.0	11.5	10.5	3.0	3.0	0.0	0.0	1.0	0.5	4.0	1.5
8	19.0	17.0	11.0	9.5	3.5	2.0	1.0	0.0	1.0	0.5	1.5	1.0
9	21.0	18.5	12.5	10.5	4.5	3.5	1.5	1.0	1.0	0.5	2.0	1.0
10	21.0	19.5	13.5	11.5	5.0	4.5	1.5	1.0	1.0	0.5	1.5	0.5
11	21.0	19.5	13.5	12.5	5.0	4.5	2.0	1.5	1.5	1.0	2.0	1.0
12	21.5	20.5	13.5	12.0	4.5	3.5	2.0	1.5	2.0	1.0	2.5	1.5
13	21.5	18.0	13.0	11.0	3.5	3.0	3.0	2.0	1.0	0.0	3.0	2.0
14	18.0	16.5	11.0	9.5	3.0	2.0	3.0	2.0	1.0	0.0	5.0	1.5
15	17.0	15.0	9.5	6.5	3.0	2.5	2.5	1.5	1.0	0.5	4.5	3.0
16	15.0	13.0	6.5	6.0	2.5	1.5	2.5	1.0	1.5	0.5	3.5	3.0
17	13.5	12.5	6.0	5.5	3.0	2.0	3.0	1.5	1.0	0.5	4.0	2.5
18	13.5	13.0	6.0	5.5	3.0	2.0	2.5	1.5	1.5	0.5	4.0	2.5
19	15.0	13.5	6.5	6.0	3.5	2.0	3.0	2.0	1.0	0.5	3.5	3.0
20	15.0	13.5	8.0	6.5	3.5	3.0	3.0	2.5	0.5	0.0	3.0	1.5
21	16.5	14.5	7.0	6.5	3.0	3.0	3.5	2.5	0.0	0.0	3.5	1.0
22	16.5	15.0	7.0	6.0	3.5	2.0	4.5	3.0	0.5	0.0	3.5	2.5
23	15.5	14.5	6.0	2.0	4.5	3.5	4.5	3.0	1.0	0.5	3.5	2.0
24	15.5	14.0	2.0	1.5	3.5	1.0	5.5	3.5	1.0	0.5	3.5	1.5
25	16.0	14.5	3.0	2.0	1.5	1.0	4.5	3.5	2.0	0.5	3.5	2.0
26	17.0	15.5	4.0	2.0	1.0	0.5	4.0	2.0	2.0	1.0	4.0	2.5
27	18.0	16.0	4.5	3.5	2.0	0.5	2.0	0.5	2.5	1.5	5.0	3.0
28	17.0	15.0	4.0	3.5	2.0	1.5	3.5	1.5	2.5	1.5	6.0	4.5
29	17.0	15.5	5.5	3.5	2.5	1.5	3.5	1.5	---	---	6.0	5.0
30	16.5	15.0	5.5	5.0	3.0	2.0	2.5	0.5	---	---	6.0	4.5
31	15.0	14.0	---	---	3.5	2.0	2.0	1.0	---	---	7.0	4.5
MONTH	21.5	12.5	14.0	1.5	7.5	0.5	5.5	0.0	4.5	0.0	7.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.0	14.0	12.5	23.5	21.0	29.5	26.5	29.0	26.0	28.0	25.5
2	8.5	6.5	14.5	13.0	22.5	21.0	29.5	27.0	29.0	28.0	28.5	27.0
3	8.0	5.5	15.5	12.0	24.5	22.5	30.5	28.0	30.5	28.5	29.5	28.0
4	8.0	5.0	16.0	13.0	26.5	24.0	30.5	28.5	29.5	28.0	30.0	29.0
5	7.0	6.5	18.5	14.5	27.0	25.5	29.5	28.0	29.5	26.5	---	---
6	8.0	6.0	18.5	16.0	27.0	26.0	31.5	28.5	29.0	28.0	---	---
7	8.5	6.5	17.5	15.5	27.0	24.5	32.5	30.0	30.0	27.5	31.5	31.0
8	11.0	8.0	17.5	15.5	26.5	21.5	32.0	30.0	31.0	26.5	31.5	30.0
9	13.0	9.5	17.0	15.0	23.0	21.0	32.5	30.5	31.0	29.0	32.5	29.5
10	12.0	9.5	19.0	16.0	24.0	21.5	32.5	29.0	30.5	29.5	31.5	29.5
11	14.0	10.0	19.5	17.5	24.5	22.0	31.0	29.0	30.0	28.0	31.0	30.0
12	15.0	11.5	19.0	17.0	26.5	24.0	30.0	27.5	30.5	28.0	30.0	28.5
13	15.0	13.5	17.0	15.5	27.0	25.0	29.0	25.0	31.0	28.5	29.5	23.0
14	14.0	10.0	18.5	15.0	26.5	26.0	---	---	30.5	27.5	25.0	21.5
15	---	---	19.0	16.0	26.5	25.0	---	---	29.5	27.0	26.0	25.0
16	13.0	12.5	19.0	17.5	26.5	24.0	---	---	29.5	28.0	26.5	25.5
17	12.5	10.0	21.0	17.5	26.5	23.5	---	---	29.0	25.0	26.0	25.0
18	13.0	9.0	23.0	18.5	27.0	25.5	---	---	27.0	23.5	25.5	24.0
19	13.5	11.5	24.5	21.5	27.5	25.0	---	---	28.0	24.5	26.0	25.0
20	15.0	12.0	25.0	22.5	29.0	26.0	---	---	28.5	26.5	26.0	23.0
21	15.0	13.0	25.0	23.0	24.5	21.5	29.5	27.0	29.5	28.5	24.0	21.0
22	14.0	12.0	23.5	21.0	28.0	23.0	30.5	25.5	30.5	29.0	24.0	22.5
23	14.5	11.5	23.5	22.5	28.0	25.0	30.5	29.0	30.0	27.5	24.0	22.0
24	14.0	11.0	23.0	20.0	29.0	26.0	30.0	26.5	29.0	27.0	25.0	22.0
25	13.0	11.0	21.0	17.0	29.5	27.5	30.0	26.0	28.5	26.0	25.5	23.0
26	13.0	11.5	17.0	15.5	29.5	28.5	29.0	26.5	29.5	26.0	23.5	22.0
27	13.5	11.0	17.0	15.0	31.5	29.0	29.5	26.5	29.5	27.5	25.0	23.0
28	13.0	11.0	19.5	15.0	33.5	29.5	29.0	26.5	28.5	26.5	25.0	24.0
29	11.5	10.5	20.5	18.0	33.0	30.0	29.5	26.5	30.0	26.5	27.5	25.0
30	13.5	10.5	22.5	18.5	31.0	27.0	29.0	25.5	30.5	29.0	27.5	26.0
31	---	---	23.5	20.5	---	---	27.0	25.0	30.0	27.0	---	---
MONTH	15.0	5.0	25.0	12.0	33.5	21.0	---	---	31.0	23.5	32.5	21.0
YEAR	33.5	0.0										

04212700 ASHTABULA RIVER AT ASHTABULA, OHIO

LOCATION.--Lat 41°54'00", long 80°47'44", Ashtabula County, on right bank at Jack's Automarine, 600 ft upstream from bridge on State Highway 531, 4,000 ft upstream from mouth, and 4,000 ft downstream from Fields Brook, in Ashtabula.

DRAINAGE AREA.--136 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1968 to September 1971.
Water temperatures: June 1968 to September 1971.

EXTREMES.--1970-71:
Specific conductance: Maximum, 2,980 micromhos Aug. 18; minimum, 50 micromhos Feb. 25.
Dissolved oxygen: Maximum, 15.0 mg/l Feb. 22-28; minimum, 0.0 mg/l Mar. 16, 17.

Period of record:
Specific conductance (1968-69, 1970-71): Maximum, 2,980 micromhos Aug. 18, 1971; minimum, 50 micromhos Feb. 25, 1971.
pH (1968-69): Maximum, 9.4 Feb. 27, 1969; minimum, 4.8 Oct. 30, 1968.
Dissolved oxygen (1970-71): Maximum, 15.0 mg/l Feb. 22-28, 1971; minimum, 0.0 mg/l Mar. 16, 17, 1971.
Water temperatures (1968-69): Maximum, 29.0°C Aug. 23, 24, 1968; minimum, freezing point on many days during December 1968 to March 1969.

REMARKS.--Continuous water-quality recorder operated since June 1968. Maximum recorded specific conductance value of 3,000 micromhos or greater occurred Aug. 20, 1970. Maximum recorded pH 11.7 occurred Aug. 22, 1970. Minimum recorded pH 4.4 occurred Sept. 28. 1970. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on maximum specific conductance and minimum specific conductance of the samples collected each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.												
04...	1000	84	0	56	140	.3	2.9	420	150	81	697	--
07...	1600	--	--	--	--	--	--	--	--	--	--	14
15...	1025	53	0	43	51	1.6	2.8	196	81	38	331	--
NOV.												
07...	2000	60	0	50	85	1.4	3.4	294	120	71	487	--
09...	2000	72	0	75	160	.2	6.1	452	150	91	782	--
DEC.												
02...	1430	50	0	45	70	.1	3.4	234	84	43	438	--
04...	1305	71	0	49	45	.2	4.4	224	110	52	370	--
JAN.												
12...	1255	97	0	36	56	.2	1.9	246	140	60	407	--
FEB.												
18...	--	51	0	50	82	.4	2.6	284	120	78	462	--
21...	2200	24	0	26	31	.2	2.5	142	58	38	216	--
MAR.												
10...	1500	38	0	37	39	.1	2.2	182	76	45	294	--
25...	1500	44	0	54	92	.2	2.7	290	120	84	430	--
APR.												
13...	1600	84	0	83	160	.2	3.4	462	160	91	828	--
MAY												
04...	1500	86	0	78	160	.2	1.8	490	160	90	828	--
29...	2400	99	0	90	210	.3	1.4	652	220	140	1020	--
JUNE												
02...	1130	--	--	--	--	--	--	--	--	--	--	8.0
02...	1525	115	0	78	180	.2	1.4	488	200	110	946	--
07...	1200	110	0	63	150	.2	4.3	424	190	100	795	--
JULY												
14...	1200	120	0	28	38	.2	3.6	198	140	42	372	--
23...	1400	108	0	91	320	.3	3.7	734	270	180	1280	--
AUG.												
05...	1200	114	0	65	240	.2	4.3	504	210	120	873	--
07...	2000	124	0	98	410	.3	1.2	894	290	190	152	--
SEP.												
21...	1200	106	0	83	300	.3	6.4	728	240	150	1290	--
24...	1600	110	0	73	210	.2	5.9	572	200	110	1020	--

DATE	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED SILVER (AG) (UG/L)
OCT.											
07...	0	0	0	10	0	12	0	.6	180	0	8
JUNE											
02...	10	--	--	--	--	--	--	1.7	--	--	--

04212700 ASHTABULA RIVER AT ASHTABULA, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	369	297	504	336	345	273	797	545	412	382	317	141
2	651	333	432	150	486	345	851	281	397	376	250	121
3	690	600	510	432	525	480	799	469	409	382	640	193
4	818	638	555	297	660	278	1240	340	514	385	771	489
5	920	815	375	306	332	284	304	193	1170	463	489	296
6	817	97	408	357	446	332	304	199	1100	388	571	226
7	280	106	492	396	553	409	301	238	388	283	730	190
8	472	253	723	489	565	385	351	243	391	259	297	180
9	504	435	792	525	775	553	378	279	463	322	---	---
10	702	504	855	630	823	262	408	351	322	277	312	294
11	938	702	849	330	786	516	432	366	325	274	315	273
12	1150	932	612	507	786	273	542	376	343	313	625	166
13	1070	203	516	336	387	264	550	370	463	337	619	195
14	325	163	414	297	366	261	604	382	475	349	566	356
15	369	249	456	198	402	351	460	382	---	---	356	146
16	333	273	204	168	461	380	445	388	---	---	381	210
17	381	330	285	204	671	371	421	364	---	---	367	262
18	420	357	468	282	371	287	379	343	---	---	433	301
19	480	402	591	393	464	335	367	343	---	---	730	364
20	729	399	654	300	469	433	358	337	---	---	708	312
21	813	702	768	345	730	406	556	340	---	---	540	348
22	804	432	450	333	718	676	469	331	409	280	603	213
23	963	429	453	426	799	667	466	343	354	168	424	304
24	639	330	567	453	913	589	463	334	192	132	449	355
25	603	426	666	315	711	552	532	352	132	50	479	185
26	615	441	813	348	717	633	727	346	121	67	484	151
27	885	351	846	447	759	690	706	415	261	111	578	225
28	939	882	447	213	819	603	451	415	144	111	500	200
29	1050	792	351	216	666	489	436	400	---	---	693	150
30	1200	999	312	234	554	182	538	400	---	---	740	551
31	1160	441	---	---	590	173	412	391	---	---	613	427
MONTH	1200	97	855	150	913	173	1240	193	---	---	771	121

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	940	613	742	460	1020	927	---	---	1300	1150	1340	1040
2	1250	914	752	656	1160	780	---	---	1500	1160	1370	999
3	1140	544	809	716	1170	879	---	---	1440	1140	2610	1240
4	544	408	843	768	1060	633	---	---	1570	1410	2890	1130
5	496	424	918	774	1220	678	---	---	1560	798	2230	1050
6	510	471	906	723	1050	696	---	---	1310	987	2660	1140
7	557	485	957	753	996	702	---	---	1640	1160	1280	1110
8	616	529	1030	828	813	246	[illegible]	711	1640	1300	1290	882
9	675	579	1050	825	387	243	811	607	1580	1300	1250	933
10	746	647	831	696	456	366	846	705	1630	1180	1090	951
11	858	720	831	465	573	420	901	736	1260	1060	1140	921
12	743	617	828	462	702	513	860	626	2950	744	1140	972
13	823	607	936	597	642	480	975	648	1140	819	1460	1110
14	1110	823	954	675	693	486	810	285	1530	1140	1540	1100
15	887	509	732	591	789	633	956	611	2870	1370	1560	1220
16	627	495	693	555	951	720	1010	758	2100	1340	1550	1390
17	660	591	786	570	906	588	1030	808	2760	792	1440	1180
18	823	655	855	507	936	543	1180	546	2980	822	1260	597
19	823	652	684	462	876	621	936	582	2960	1350	1020	603
20	683	641	768	465	837	558	1100	755	2580	1310	1140	774
21	734	635	804	531	750	630	1280	878	2630	1140	1730	1060
22	921	726	855	600	921	405	1520	1050	2590	1770	1260	645
23	921	819	921	684	1100	456	1410	900	---	---	996	675
24	913	751	921	642	1140	606	1390	1080	2300	669	1160	498
25	994	850	894	657	1310	747	2440	1180	1690	870	951	621
26	1000	896	1020	825	834	666	2440	1130	1460	1140	996	855
27	1050	917	1120	906	1130	762	2380	765	2360	1280	1080	936
28	1040	870	1120	897	1220	753	1230	776	1670	1500	1690	870
29	903	843	1070	948	1130	840	1200	951	2550	1440	1610	1340
30	862	424	1120	975	---	---	1110	1000	---	---	1490	990
31	---	---	1190	903	---	---	1600	1040	---	---	---	---
MONTH	1250	408	1190	460	1310	243	---	---	2980	669	2890	498
YEAR	2980	50										

04212700 ASHTABULA RIVER AT ASHTABULA, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.8	7.2	9.8	8.9	---	---	---	---	---	---	---	---
2	7.9	7.6	9.4	8.4	---	---	---	---	---	---	---	---
3	7.6	7.0	9.4	8.0	---	---	---	---	---	---	---	---
4	7.0	6.8	8.7	7.8	---	---	---	---	---	---	---	---
5	6.8	6.4	8.7	8.1	---	---	---	---	---	---	---	---
6	7.7	6.5	8.4	8.1	---	---	---	---	---	---	---	---
7	7.2	6.6	8.5	8.1	---	---	---	---	---	---	---	---
8	8.4	7.0	8.6	8.2	---	---	---	---	---	---	---	---
9	8.5	7.5	8.6	8.4	---	---	---	---	---	---	---	---
10	7.9	7.2	10.0	7.1	---	---	---	---	---	---	---	---
11	7.3	7.0	9.7	9.1	---	---	---	---	---	---	---	---
12	8.4	7.2	9.3	7.4	---	---	---	---	---	---	---	---
13	9.5	8.1	8.9	7.3	---	---	---	---	---	---	---	---
14	9.4	7.8	9.5	8.0	---	---	---	---	---	---	---	---
15	9.7	7.3	9.5	7.0	---	---	---	---	---	---	---	---
16	7.3	7.1	9.1	7.1	---	---	---	---	---	---	---	---
17	7.3	7.1	9.6	7.1	---	---	---	---	---	---	---	---
18	7.7	7.3	9.8	9.C	---	---	---	---	---	---	---	---
19	8.0	7.5	9.9	7.4	---	---	---	---	---	---	---	---
20	8.2	7.7	---	---	---	---	---	---	---	---	---	---
21	9.6	8.2	---	---	---	---	---	---	---	---	---	---
22	9.8	9.5	---	---	---	---	---	---	---	---	---	---
23	9.7	7.4	---	---	---	---	---	---	---	---	---	---
24	8.6	8.0	---	---	---	---	---	---	---	---	---	---
25	8.2	7.9	---	---	---	---	---	---	---	---	---	---
26	8.6	7.1	---	---	---	---	---	---	---	---	---	---
27	8.5	7.5	---	---	---	---	---	---	---	---	---	---
28	7.5	7.3	---	---	---	---	---	---	---	---	---	---
29	7.8	7.3	---	---	---	---	---	---	---	---	---	---
30	8.9	6.4	---	---	---	---	---	---	---	---	---	---
31	9.7	7.4	---	---	---	---	---	---	---	---	---	---
MONTH	5.8	6.4	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.4	7.1	7.6	7.5	7.5	7.0	7.5	7.2	7.3	7.0
2	---	---	7.7	7.3	8.0	7.2	7.9	7.0	7.6	7.3	7.2	6.9
3	---	---	8.0	7.3	8.4	7.5	7.2	7.0	7.5	7.3	7.1	6.9
4	---	---	8.4	7.5	8.7	7.4	7.1	7.0	7.3	7.2	7.2	7.0
5	---	---	7.5	7.2	7.6	7.4	7.2	7.0	7.7	7.2	7.4	7.0
6	---	---	7.6	7.0	8.0	7.3	7.4	7.2	8.0	7.3	7.0	6.9
7	---	---	7.6	7.0	7.5	7.3	7.3	7.2	7.4	7.2	7.0	6.7
8	---	---	7.4	7.1	7.3	7.0	7.5	7.2	7.3	7.1	7.1	6.7
9	---	---	7.9	7.C	7.2	7.0	7.6	7.4	7.3	7.2	8.3	6.9
10	---	---	9.1	7.0	7.3	7.C	7.5	7.3	7.2	7.1	10.0	7.2
11	---	---	7.5	6.9	7.2	7.C	7.5	7.3	7.2	7.2	7.4	7.3
12	---	---	8.4	6.8	7.3	7.0	7.5	7.5	7.4	7.2	7.3	7.2
13	7.8	7.6	8.3	7.1	7.4	7.1	7.6	7.4	7.3	7.2	7.2	7.2
14	7.6	7.4	8.0	6.7	7.3	7.1	8.3	7.5	7.2	7.1	7.3	7.1
15	7.7	7.3	9.9	7.1	7.1	7.0	7.7	7.5	7.1	7.1	7.4	7.1
16	8.1	7.3	9.6	7.2	7.1	6.9	7.5	7.4	7.1	7.1	7.1	7.0
17	9.0	7.3	9.6	7.0	7.2	6.9	7.6	7.4	7.3	7.1	7.1	7.0
18	8.1	7.4	7.5	6.9	7.2	6.9	8.0	7.4	7.3	7.2	7.5	7.1
19	7.8	7.3	8.0	6.9	7.4	7.0	8.0	7.4	7.2	7.0	7.5	7.3
20	7.7	7.5	7.7	7.0	7.3	7.2	7.7	7.4	7.1	7.0	7.6	7.2
21	7.6	7.2	8.1	7.7	7.4	7.2	7.6	7.3	7.3	7.1	7.5	7.2
22	7.6	7.4	7.8	7.7	7.8	7.2	7.5	7.2	7.1	7.0	8.6	7.3
23	7.7	7.3	7.9	7.6	7.7	7.1	7.4	7.2	7.2	7.1	7.7	7.4
24	7.4	7.2	8.0	7.6	7.4	7.1	7.3	7.1	7.3	7.2	8.0	7.3
25	7.3	7.2	8.0	7.7	7.4	7.1	7.1	6.9	7.8	7.2	7.8	7.5
26	9.2	7.2	7.7	7.6	7.3	7.2	7.2	7.0	7.2	7.2	7.5	7.4
27	8.7	7.2	7.6	7.4	7.2	6.9	7.6	7.0	7.3	7.2	7.7	7.4
28	8.2	7.3	7.5	7.4	7.2	6.9	7.5	7.2	7.2	7.2	7.8	7.4
29	7.8	7.3	7.5	7.4	7.1	6.9	7.6	7.2	7.2	7.1	7.5	7.3
30	8.2	7.3	7.5	7.4	7.2	6.8	7.5	7.3	7.2	7.1	7.5	7.3
31	---	---	7.6	7.5	---	---	7.4	7.2	7.2	7.1	---	---
MONTH	---	---	9.9	6.7	8.7	6.8	8.3	6.9	8.0	7.0	10.0	6.7

04212700 ASHTABULA RIVER AT ASHTABULA, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1071

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.7	10.1	9.7	9.2	12.1	11.6	13.6	13.1	13.8	13.6	---	---
2	10.2	9.6	9.6	9.3	11.8	11.2	13.5	13.1	13.7	13.6	---	---
3	9.7	9.0	9.6	8.9	11.7	11.3	13.5	13.1	13.7	13.5	---	---
4	9.2	9.0	10.4	8.5	12.5	11.6	13.2	12.6	13.6	13.2	---	---
5	9.6	9.2	10.5	8.9	12.9	12.5	13.7	13.2	13.4	12.1	---	---
6	10.8	9.6	10.6	8.9	13.4	12.9	---	---	13.2	12.3	---	---
7	10.9	10.3	10.5	9.8	13.8	13.5	---	---	13.5	13.2	---	---
8	10.3	9.6	10.2	9.7	13.8	13.7	---	---	13.5	13.3	---	---
9	9.9	9.2	9.9	9.3	13.7	13.2	---	---	13.3	13.1	---	---
10	9.3	8.8	10.1	9.5	13.2	12.7	---	---	13.4	13.2	12.7	9.0
11	8.8	7.1	9.6	8.2	13.0	12.5	---	---	13.4	13.2	12.6	11.0
12	7.1	6.0	9.5	8.7	13.0	12.4	14.0	13.7	13.3	13.1	11.1	10.2
13	8.5	6.3	9.7	9.1	13.3	13.0	14.1	13.6	13.1	12.9	10.4	10.0
14	8.7	7.2	10.1	9.7	13.6	13.3	13.8	13.4	13.2	12.9	10.4	9.7
15	9.3	7.5	11.0	9.3	13.6	13.2	13.7	13.5	---	---	10.3	9.5
16	9.8	9.3	11.4	9.6	13.7	13.4	13.8	13.5	---	---	9.6	0.0
17	10.1	9.8	11.5	11.4	13.6	13.2	13.9	13.7	---	---	8.8	0.0
18	10.2	9.9	11.4	9.8	13.7	13.4	14.0	13.8	---	---	8.0	2.2
19	10.1	9.8	11.1	9.6	13.5	13.0	14.1	13.9	---	---	7.8	1.8
20	9.9	9.8	10.9	10.8	13.1	12.8	14.1	14.0	---	---	8.5	1.9
21	9.9	9.4	11.4	10.5	13.3	12.9	14.0	13.7	---	---	8.1	4.7
22	9.5	7.7	11.4	9.7	13.1	13.0	14.1	13.7	15.0	13.6	8.7	1.3
23	9.2	8.9	11.5	9.8	13.1	12.9	13.8	13.5	15.0	15.0	8.8	2.7
24	9.7	8.9	12.3	10.2	13.5	12.8	13.8	13.6	15.0	15.0	9.0	4.4
25	9.3	8.7	12.5	12.3	13.7	13.4	13.8	13.6	15.0	15.0	10.3	7.2
26	8.9	8.6	12.5	12.3	13.5	13.3	13.8	13.1	15.0	15.0	9.9	2.7
27	8.7	8.4	12.4	12.0	13.5	13.3	13.8	13.2	15.0	15.0	9.6	7.7
28	8.5	8.3	12.4	10.6	13.6	13.3	13.8	13.6	15.0	15.0	10.1	8.1
29	8.5	7.9	12.0	10.4	13.8	13.6	13.8	13.7	---	---	9.4	8.1
30	8.5	8.0	11.7	11.6	---	---	13.8	13.5	---	---	10.2	8.0
31	9.5	8.2	---	---	---	---	13.9	13.7	---	---	10.8	5.8
MONTH	10.9	6.0	12.5	8.2	13.8	11.2	14.1	12.6	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.9	7.1	9.9	8.6	5.4	4.8	3.1	2.5	5.5	2.4	2.7	1.4
2	10.3	8.7	8.7	8.3	6.0	4.9	3.0	2.4	6.6	3.6	2.8	0.4
3	10.4	10.0	9.0	8.7	6.5	5.4	3.3	2.8	6.0	4.0	0.7	0.3
4	10.9	9.8	9.6	9.0	6.9	5.6	3.8	3.1	4.0	2.6	1.3	0.7
5	11.0	10.6	9.8	9.3	7.5	5.4	4.4	3.9	5.2	2.6	1.3	0.7
6	11.1	10.4	9.6	9.1	6.6	5.3	4.9	4.1	5.4	3.2	2.0	0.5
7	11.1	10.2	9.3	8.3	6.8	5.1	4.3	3.8	4.8	1.5	2.6	1.3
8	11.1	9.6	8.6	7.5	8.5	5.0	4.3	3.5	2.3	1.0	3.2	1.9
9	11.0	10.6	8.3	7.8	8.6	7.8	4.7	3.4	2.4	1.2	4.6	2.6
10	10.9	10.3	9.2	8.3	7.9	7.1	3.8	3.0	2.0	1.2	6.7	3.6
11	10.7	2.4	9.3	8.4	7.3	6.5	3.9	3.3	1.7	0.7	5.6	4.0
12	9.3	6.8	9.2	8.5	7.4	6.3	4.7	3.8	2.7	0.9	4.0	2.5
13	9.8	5.6	8.8	8.2	7.7	6.9	4.6	3.8	2.6	2.0	3.7	2.5
14	8.9	8.1	8.6	8.2	7.1	6.1	7.8	4.3	2.9	1.7	4.3	2.5
15	10.1	8.5	9.3	8.5	6.1	5.7	6.3	4.9	1.7	1.3	3.7	2.5
16	10.6	9.5	8.7	8.4	6.3	5.5	5.1	4.3	1.9	1.4	2.6	2.3
17	9.9	9.3	8.5	7.9	6.1	4.7	5.0	4.3	3.2	1.6	3.2	2.1
18	9.3	8.5	8.4	7.6	6.1	4.8	6.4	4.4	3.2	2.5	6.8	2.9
19	9.9	8.6	8.1	7.5	5.7	4.8	6.5	4.5	2.6	1.8	6.6	4.6
20	10.0	9.3	7.8	6.6	6.1	5.5	5.8	4.7	2.1	1.7	5.0	3.7
21	9.4	8.7	7.2	6.4	6.4	5.4	5.3	4.7	2.1	1.7	5.0	2.9
22	9.0	8.7	7.2	6.0	8.5	5.2	5.3	3.4	2.1	1.3	7.4	3.7
23	9.1	8.7	6.8	5.9	8.1	4.9	4.3	3.1	1.4	1.0	7.2	4.7
24	9.1	8.5	7.9	6.2	5.9	4.1	3.4	1.6	3.4	1.0	8.5	4.2
25	8.8	8.5	7.6	6.3	5.7	4.0	1.6	0.8	2.7	2.2	7.7	6.1
26	8.9	8.7	6.3	5.6	5.8	4.7	1.7	1.2	2.5	1.8	6.2	4.6
27	8.8	8.4	5.8	5.1	4.7	1.3	4.8	1.2	2.1	1.7	4.7	3.6
28	8.9	8.5	6.0	5.0	3.6	1.1	4.8	2.6	2.2	1.9	4.7	3.4
29	8.9	8.7	6.0	5.6	3.1	1.3	5.2	2.2	2.2	1.4	4.3	2.6
30	9.5	8.7	6.0	5.4	3.6	2.1	4.8	2.8	1.4	1.3	5.5	2.8
31	---	---	6.2	5.4	---	---	4.1	2.4	1.5	1.4	---	---
MONTH	11.1	2.4	9.9	5.0	8.6	1.1	7.8	0.8	6.6	0.7	8.5	0.3
YEAR	15.0	0.0										

04212700 ASHTABULA RIVER AT ASHTABULA, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	13.5	12.0	7.5	5.5	---	---	1.5	1.0	7.0	4.5
2	---	---	13.5	12.0	8.5	7.5	---	---	1.5	0.0	7.0	5.5
3	---	---	14.5	12.5	8.5	3.5	---	---	1.5	1.0	5.5	4.5
4	---	---	13.0	9.5	8.0	6.5	---	---	2.0	1.0	4.5	2.0
5	---	---	11.0	8.0	---	---	---	---	3.0	1.5	3.5	2.0
6	---	---	10.0	9.0	---	---	---	---	2.0	1.0	4.0	3.0
7	---	---	10.5	10.0	---	---	---	---	1.5	1.0	5.0	1.0
8	---	---	10.5	9.0	---	---	---	---	1.5	1.0	2.5	1.5
9	---	---	11.0	10.0	---	---	---	---	1.5	0.5	---	---
10	---	---	11.5	10.0	---	---	---	---	1.5	1.0	1.0	0.5
11	---	---	13.0	10.0	---	---	---	---	1.5	0.5	1.0	0.5
12	---	---	12.5	11.5	---	---	1.5	1.0	1.5	1.0	2.0	0.5
13	---	---	12.5	10.5	---	---	2.0	1.0	1.5	1.0	1.5	1.0
14	---	---	11.0	9.0	---	---	2.0	1.0	1.5	0.0	8.0	0.5
15	16.5	15.5	9.5	6.0	---	---	1.5	1.0	---	---	9.5	5.0
16	15.5	12.5	6.0	5.0	---	---	1.5	1.0	---	---	9.5	8.5
17	13.0	10.5	4.5	3.5	---	---	1.5	0.5	---	---	7.5	4.5
18	12.0	10.5	5.5	4.0	---	---	1.0	0.5	---	---	6.0	2.5
19	13.0	11.0	6.5	5.5	---	---	1.5	1.0	---	---	5.5	2.0
20	14.0	12.5	7.5	6.0	---	---	1.0	0.0	---	---	5.5	2.0
21	14.5	13.0	8.5	6.0	---	---	2.0	1.0	---	---	3.5	0.0
22	15.5	13.5	7.0	6.0	---	---	1.5	0.0	2.0	1.5	6.0	3.5
23	16.5	14.5	6.0	2.5	---	---	1.5	0.0	2.0	1.5	6.5	3.5
24	15.5	14.0	3.0	1.0	---	---	1.5	1.0	2.0	1.5	4.5	2.0
25	16.0	12.5	1.0	0.0	---	---	1.5	0.5	3.0	1.0	3.5	1.5
26	16.0	14.5	2.0	0.0	---	---	2.0	1.0	4.0	2.0	3.5	1.5
27	16.0	14.5	3.0	1.0	---	---	1.5	0.5	4.5	2.0	5.0	2.5
28	16.5	14.0	5.0	1.5	---	---	1.5	0.5	7.5	4.0	7.0	4.0
29	15.0	13.0	6.5	4.5	---	---	1.5	1.0	---	---	7.5	6.0
30	15.0	13.0	7.5	6.0	---	---	1.5	0.5	---	---	7.0	5.5
31	14.5	12.5	---	---	---	---	1.5	0.5	---	---	7.0	4.5
MONTH	---	---	14.5	0.0	---	---	---	---	---	---	9.5	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	6.0	11.5	11.0	19.0	18.5	26.0	24.5	25.5	23.5	24.0	23.5
2	9.0	7.5	12.0	11.0	24.0	17.0	26.0	25.0	24.5	23.5	24.5	23.0
3	9.0	6.5	12.0	11.5	17.5	15.0	26.0	25.0	25.0	22.0	24.5	24.0
4	6.5	5.5	13.0	12.0	25.5	16.0	26.0	25.0	25.0	24.5	24.5	24.0
5	6.5	6.0	13.5	12.0	22.0	19.5	26.0	23.5	24.5	24.0	25.5	24.0
6	6.0	5.5	13.5	12.5	22.0	19.5	25.0	23.0	24.0	23.5	26.0	25.0
7	6.5	5.5	14.0	12.5	23.0	19.5	26.0	24.0	24.5	23.0	26.0	25.0
8	7.0	5.5	13.5	13.0	23.0	21.0	26.0	24.5	27.0	23.0	26.5	24.0
9	7.5	6.5	14.0	13.0	21.5	19.0	25.0	24.0	27.0	25.5	---	---
10	8.5	7.0	15.0	13.5	20.5	19.0	25.0	24.0	27.0	25.5	---	---
11	9.5	7.5	15.5	12.0	20.0	15.0	24.5	24.0	25.5	25.0	---	---
12	10.5	7.5	14.0	11.0	21.0	19.5	24.5	22.5	25.5	25.0	---	---
13	12.0	8.5	13.0	11.5	20.5	18.5	23.5	19.0	25.5	25.0	---	---
14	13.0	11.5	13.0	11.5	20.0	18.5	22.0	19.0	26.0	25.0	---	---
15	12.0	10.0	13.0	12.0	20.0	19.0	23.0	21.5	25.5	25.0	---	---
16	12.0	10.0	13.5	12.0	20.5	19.5	23.5	22.0	25.0	24.5	---	---
17	11.0	10.0	14.5	12.5	21.0	18.5	23.5	22.5	25.0	24.0	---	---
18	11.0	10.5	15.5	12.5	21.5	18.0	23.5	22.5	25.0	24.0	---	---
19	12.5	11.0	15.5	13.5	22.5	19.5	23.5	23.0	26.0	24.0	---	---
20	13.0	12.0	16.0	13.5	22.5	19.0	24.0	23.0	25.0	23.0	---	---
21	12.5	11.5	16.0	14.0	20.5	19.5	24.0	23.0	24.0	22.0	---	---
22	12.5	12.0	16.5	15.0	21.5	20.0	23.5	22.5	25.0	23.5	---	---
23	13.0	11.5	16.5	15.5	23.0	21.0	24.0	21.5	24.5	24.5	---	---
24	12.5	11.0	16.5	15.0	24.0	21.0	24.0	24.0	24.5	23.5	---	---
25	11.0	11.0	16.5	15.5	25.0	23.0	24.5	24.0	23.5	23.0	---	---
26	11.0	10.5	16.0	16.0	23.5	22.5	24.5	24.0	24.0	23.0	---	---
27	10.5	10.0	16.0	15.5	25.0	23.0	24.5	23.5	24.0	23.5	---	---
28	11.0	10.0	16.5	16.0	25.5	23.5	26.0	23.5	24.0	23.5	---	---
29	11.0	10.5	19.0	16.5	25.0	19.0	26.0	25.0	24.5	23.5	---	---
30	11.5	10.0	19.5	18.5	25.5	24.0	26.0	25.0	24.5	23.5	---	---
31	---	---	19.5	18.5	---	---	25.5	24.5	24.0	23.5	---	---
MONTH	13.0	5.5	19.5	11.0	25.5	15.0	26.0	19.0	27.0	22.0	---	---

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04212960 CONNEAUT CREEK NEAR OHIO-PENNSYLVANIA STATE LINE, OHIO

LOCATION.--Lat 41°54'14", long 80°31'45", Ashtabula County, at Furnace Road Bridge west of Ohio-Pennsylvania State line.

DRAINAGE AREA.--151 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1969 to September 1971.

REMARKS.--Samples collected quarterly as part of the Environmental Protection Agency national network. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	ORGANIC NITROGEN (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL RESIDUE (MG/L)
DEC. 02...	1645	.02	.00	.4	.070	84	42	126
MAR. 10...	1015	.22	.00	.6	.070	92	70	162
JUNE 02...	0900	.32	.02	.1	.060	170	26	196
SEP. 01...	1000	.02	.02	.2	.070	204	50	254

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	IMMEDIATE COLIFORM (COL. PER 100 ML)
DEC. 02...	190	7.4	9.0	20	12.5	108	840
MAR. 10...	170	6.4	1.0	5	13.4	94	160
JUNE 02...	300	7.4	17.5	10	6.0	62	560
SEP. 01...	310	7.3	20.0	20	8.5	92	320

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
BEAVER RIVER BASIN							
03097200 MEANDER CREEK RESERVOIR, AT YOUNGSTOWN INTAKE, NEAR YOUNGSTOWN (LAT 41°09'20", LONG 80°46'33")							
APR.							
01-07	.00	.00	.00	.00	.00	.00	.00
MAY							
06-12	.00	.00	.00	.00	.00	.00	.00
JUNE							
04-10	.00	.00	.00	.00	.00	.00	.00
JULY							
06-12	.00	.00	.00	.00	.00	.00	.00
AUG.							
01-07	.00	.00	.00	.00	.00	.00	.00
SEP.							
17-23	.00	.00	.00	.00	.00	.00	.00
MUSKINGUM RIVER BASIN							
03144600 MUSKINGUM RIVER AT ZANESVILLE, AT BOAT DOCK AT ZANESVILLE MUNICIPAL WATER PLANT (LAT 39°57'41", LONG 81°59'39")							
OCT.							
01-08	.00	.00	.00	.00	.00	.00	.00
NOV.							
04-10	.00	.00	.00	.00	.00	.00	.00
APR.							
01-07	.00	.00	.00	.00	.00	.00	.00
MAY							
01-07	.00	.00	.00	.00	.00	.00	.00
JUNE							
01-07	.00	.00	.00	.00	.00	.00	.00
JULY							
24-30	.00	.00	.00	.00	.00	.00	.00
AUG.							
04-10	.00	.00	.00	.00	.00	.00	.00
SEP.							
01-07	.00	.00	.00	.00	.00	.00	.00
03149000 MUSKINGUM RIVER BELOW ZANESVILLE, AT BRIDGE ON STATE HIGHWAY 60 (LAT 39°52'48", LONG 81°58'46")							
OCT.							
01-07	.00	.00	.00	.00	.00	.00	.00
NOV.							
16-22	.00	.00	.00	.00	.00	.00	.00
APR.							
01-07	.00	.00	.00	.00	.00	.00	.00
MAY							
04-10	.00	.00	.00	.00	.00	.00	.00
JUNE							
01-07	.00	.00	.00	.00	.00	.00	.00
JULY							
25-31	.00	.00	.00	.00	.00	.00	.00
AUG.							
09-15	.01	.00	.00	.00	.00	.00	.00
SEP.							
20-26	.00	.00	.00	.00	.00	.00	.00
SCIOTO RIVER BASIN							
03222010 SCIOTO RIVER AT COLUMBUS, AT RAW WATER INTAKE TO CITY OF COLUMBUS, DUBLIN ROAD WATER TREATMENT PLANT (LAT 39°58'05", LONG 83°02'06")							
OCT.							
01-07	.00	.00	.00	.00	.00	.00	.00
NOV.							
01-07	.00	.00	.00	.00	.00	.00	.00
APR.							
01-07	.00	.00	.00	.00	.00	.00	.00
MAY							
06-12	.00	.00	.00	.00	.00	.00	.00
JUNE							
11-17	.00	.00	.00	.00	.02	.00	.00
JULY							
06-12	.00	.00	.00	.00	.00	.00	.00
AUG.							
05-11	.00	.00	.00	.00	.00	.00	.00
SEP.							
01-07	.00	.00	.00	.00	.00	.00	.00

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

BEAVER RIVER BASIN

03097200 MEANDER CREEK RESERVOIR, AT YOUNGSTOWN INTAKE, NEAR YOUNGSTOWN (LAT 41°09'20", LONG 80°46'33")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
APR. 01-07	.00	.00	.00	.00	.00	.00	.00
MAY 06-12	.00	.00	.00	.00	.00	.00	.00
JUNE 04-10	.00	.00	.00	.00	.00	.00	.00
JULY 06-12	.00	.00	.00	--	.00	.00	.00
AUG. 01-07	.00	.00	.00	.00	.00	.00	.00
SEP. 17-23	.00	.00	.00	.00	.00	.00	.00

MUSKINGUM RIVER BASIN

03144600 MUSKINGUM RIVER AT ZANESVILLE, AT BOAT DOCK AT ZANESVILLE MUNICIPAL WATER PLANT (LAT 39°57'41", LONG 81°59'39")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
OCT. 01-08	.00	.00	.00	.00	.00	.00	.00
NOV. 04-10	.00	.00	.00	.00	.00	.00	.00
APR. 01-07	.00	.00	.00	.00	.00	.00	.00
MAY 01-07	.00	.00	.00	.00	.00	.00	.00
JUNE 01-07	.00	.00	.00	.00	.00	.00	.00
JULY 24-30	.00	.00	.00	--	.00	.00	.00
AUG. 04-10	.00	.00	.00	.00	.00	.00	.00
SEP. 01-07	.00	.00	.00	.00	.00	.00	.00

03149000 MUSKINGUM RIVER BELOW ZANESVILLE, AT BRIDGE ON STATE HIGHWAY 60 (LAT 39°52'48", LONG 81°58'46")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
OCT. 01-07	.00	.00	.00	.00	.00	.00	.00
NOV. 16-22	.00	.00	.00	.00	.00	.00	.00
APR. 01-07	.00	.00	.00	.00	.00	.00	.00
MAY 04-10	.00	.00	.00	.00	.00	.00	.00
JUNE 01-07	.00	.00	.00	.00	.00	.00	.00
JULY 25-31	.00	.00	.00	--	.00	.00	.00
AUG. 09-15	.00	.00	.00	.00	.00	.00	.00
SEP. 20-26	.00	.00	.00	.00	.00	.00	.00

SCIOTO RIVER BASIN

03222010 SCIOTO RIVER AT COLUMBUS, AT RAW WATER INTAKE TO CITY OF COLUMBUS, DUBLIN ROAD WATER TREATMENT PLANT (LAT 39°58'05", LONG 83°02'06")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
OCT. 01-07	.00	.00	.00	.00	.00	.00	.00
NOV. 01-07	.00	.00	.00	.00	.00	.00	.00
APR. 01-07	.00	.00	.00	.00	.00	.00	.00
MAY 06-12	.00	.00	.00	.00	.00	.00	.00
JUNE 11-17	.00	.00	.00	.00	.00	.00	.00
JULY 06-12	.00	.00	.00	--	.00	.00	.00
AUG. 05-11	.00	.00	.00	.00	.00	.00	.00
SEP. 01-07	.00	.00	.00	.00	.00	.00	.00

PESTICIDE ANALYSES OF STREAMS IN THE OHIO RIVER BASIN IN OHIO

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
LITTLE MIAMI RIVER BASIN							
03245100 LITTLE MIAMI RIVER NEAR LOVELAND (LAT 39°14'48", LONG 84°14'42")							
APR. 01-07	.00	.00	.00	.00	.00	.00	.00
MAY 01-07	.00	.00	.00	.00	.00	.00	.00
JUNE 01-07	.00	.00	.00	.00	.00	.00	.00
JULY 08-14	.00	.00	.00	.00	.01	.00	.00
AUG. 08-14	.00	.00	.00	.00	.00	.00	.00
SEP. 12-18	.00	.00	.00	.00	.00	.00	.00
GREAT MIAMI RIVER BASIN							
03270010 MAD RIVER AT DAYTON, AT MANMADE CHANNEL OF MAD RIVER, JUST EAST OF HARSHMAN ROAD (LAT 39°47'22", LONG 84°06'42")							
OCT. 01-07	.00	.00	.00	.00	.00	.00	.00
NOV. 05-11	.00	.00	.00	.00	.00	.00	.00
APR. 01-07	.00	.00	.00	.00	.00	.00	.00
MAY 06-12	.00	.00	.00	.00	.00	.00	.00
JUNE 01-07	.00	.00	.00	.00	.00	.00	.00
JULY 01-07	.00	.00	.00	.00	.00	.00	.00
AUG. 01-07	.00	.00	.00	.00	.00	.00	.00
SEP. 01-07	.00	.00	.00	.00	.00	.00	.00

PESTICIDE ANALYSES OF STREAMS IN THE ST. LAWRENCE RIVER BASIN IN OHIO

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
STREAMS TRIBUTARY TO LAKE ERIE							
04193490 MAUMEE RIVER NEAR WATERVILLE, AT RAW WATER INTAKE TO BOWLING GREEN WATER TREATMENT PLANT (LAT 41°28'34", LONG 83°44'20")							
OCT. 04-10	.00	.00	.00	.00	.00	.00	.00
NOV. 05-11	.00	.00	.00	.00	.00	.00	.00
APR. 19-25	.00	.00	.00	.00	.00	.00	.00
MAY 03-09	.00	.00	.00	.00	.00	.00	.00
JUNE 01-07	.00	.00	.00	.00	.00	.00	.00
JULY 19-25	.00	.00	.00	.00	.00	.00	.00
AUG. 02-08	.00	.00	.00	.00	.00	.00	.00
SEP. 08-14	.00	.00	.00	.00	.00	.00	.00
04198002 SANDUSKY RIVER AT FREMONT, AT RAW WATER INTAKE TO FREMONT WATER TREATMENT PLANT (LAT 41°20'00", LONG 83°07'13")							
OCT. 02-08	.00	.00	.00	.00	.00	.00	.00
NOV. 04-10	.00	.00	.00	.00	.00	.00	.00
APR. 01-07	.00	.00	.00	.00	.00	.00	.00
MAY 06-12	.00	.00	.00	.00	.00	.00	.00
JUNE 01-07	.00	.00	.00	.00	.00	.00	.00
JULY 18-24	.00	.00	.00	.00	.00	.00	.00
AUG. 08-14	.00	.00	.00	.00	.00	.00	.00
SEP. 09-15	.00	.00	.00	.00	.00	.00	.00

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

LITTLE MIAMI RIVER BASIN

03245100 LITTLE MIAMI RIVER NEAR LOVELAND (LAT 39°14'48", LONG 84°14'42")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
APR.							
01-07	.00	.00	.00	.00	.00	.00	.00
MAY							
01-07	.00	.00	.00	.00	.00	.00	.00
JUNE							
01-07	.00	.00	.00	.00	.00	.00	.00
JULY							
08-14	.00	.00	.00	--	.00	.00	.07
AUG.							
08-14	.00	.00	.00	.00	.00	.00	.00
SEP.							
12-18	.00	.00	.00	.00	.00	.00	.00

GREAT MIAMI RIVER BASIN

03270010 MAD RIVER AT DAYTON, AT MANMADE CHANNEL OF MAD RIVER, JUST EAST OF HARSHMAN ROAD (LAT 39°47'22", LONG 84°06'42")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
OCT.							
01-07	.00	.00	.00	.00	.00	.00	.00
NOV.							
05-11	.00	.00	.00	.00	.00	.00	.00
APR.							
01-07	.00	.00	.00	.00	.00	.00	.00
MAY							
06-12	.00	.00	.00	.00	.00	.00	.00
JUNE							
01-07	.00	.00	.00	.00	.00	.00	.00
JULY							
01-07	.00	.00	.00	--	.00	.00	.00
AUG.							
01-07	.00	.00	.00	.00	.00	.00	.00
SEP.							
01-07	.00	.00	.00	.00	.00	.00	.00

PESTICIDE ANALYSES OF STREAMS IN THE ST. LAWRENCE RIVER BASIN IN OHIO

STREAMS TRIBUTARY TO LAKE ERIE

04193490 MAUMEE RIVER NEAR WATERVILLE, AT RAW WATER INTAKE TO BOWLING GREEN WATER TREATMENT PLANT (LAT 41°28'34", LONG 83°44'20")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
OCT.							
04-10	.00	.00	.01	.00	.00	.00	.00
NOV.							
05-11	.00	.00	.00	.00	.00	.00	.00
APR.							
19-25	.00	.00	.00	.00	.00	.00	.00
MAY							
03-09	.00	.00	.00	.00	.00	.00	.00
JUNE							
01-07	.00	.00	.00	.00	.00	.00	.00
JULY							
19-25	.00	.00	.00	--	.00	.00	.00
AUG.							
02-08	.50	.00	.00	.00	.00	.00	.00
SEP.							
08-14	.00	.00	.00	.00	.00	.00	.00

04198002 SANDUSKY RIVER AT FREMONT, AT RAW WATER INTAKE TO FREMONT WATER TREATMENT PLANT (LAT 41°20'00", LONG 83°07'13")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
OCT.							
02-08	.00	.00	.00	.00	.00	.00	.00
NOV.							
04-10	.00	.00	.00	.00	.00	.00	.00
APR.							
01-07	.00	.00	.00	.00	.00	.00	.00
MAY							
06-12	.00	.00	.00	.00	.00	.00	.00
JUNE							
01-07	.00	.00	.00	.00	.00	.00	.00
JULY							
18-24	.00	.00	.00	--	.00	.00	.00
AUG.							
08-14	.00	.00	.00	.00	.00	.00	.00
SEP.							
09-15	.00	.00	.00	.00	.00	.00	.00

PESTICIDE ANALYSES OF STREAMS IN THE ST. LAWRENCE RIVER BASIN IN OHIO

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

STREAMS TRIBUTARY TO LAKE ERIE

04202402 CUYAHOGA RIVER NEAR KENT, AT RAW WATER INTAKE TO AKRON WATER TREATMENT PLANT AT LAKE ROCKWELL (LAT 41°10'55", LONG 81°20'26")

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
OCT. 17-23	.00	.00	.00	.00	.00	.00	.00
NOV. 01-07	.00	.00	.00	.00	.00	.00	.00
APR. 05-11	.00	.00	.00	.00	.00	.00	.00
MAY 02-08	.00	.00	.00	.00	.00	.00	.00
JUNE 20-26	.00	.00	.00	.00	.00	.00	.00
JULY 11-17	.00	.00	.00	.00	.00	.00	.00
AUG. 01-07	.00	.00	.00	.00	.00	.00	.00
SEP. 01-07	.00	.00	.00	.00	.00	.00	.00

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

STREAMS TRIBUTARY TO LAKE ERIE

04202402 CUYAHOGA RIVER NEAR KENT, AT RAW WATER INTAKE TO AKRON WATER TREATMENT PLANT AT LAKE ROCKWELL (LAT 41°10'55", LONG 81°20'26")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
OCT.							
17-23	.00	.00	.00	.00	.00	.00	.00
NOV.							
01-07	.00	.00	.00	.00	.00	.00	.00
APR.							
05-11	.00	.00	.00	.00	.00	.00	.00
MAY							
02-08	.00	.00	.00	.00	.00	.00	.00
JUNE							
20-26	.00	.00	.00	.00	.00	.00	.00
JULY							
11-17	.00	.00	.00	--	.00	.00	.00
AUG.							
01-07	.00	.00	.00	.00	.00	.00	.00
SEP.							
01-07	.00	.00	.00	.00	.00	.00	.00

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
BEAVER RIVER BASIN												
03086500 - MAHONING RIVER AT ALLIANCE, OHIO (LAT 40 55 58 LONG 081 05 41)												
NOV. 13...	253	--	--	--	--	--	--	--	--	--	462	--
JAN. 15...	74	--	--	100	30	--	11	--	--	200	493	7.6
MAR. 22...	229	--	--	--	--	--	--	--	--	--	448	--
MAY 05...	18	--	--	150	28	--	8.4	--	--	320	728	7.4
JULY 12...	134	--	--	110	18	--	10	--	--	200	458	7.4
SEP. 17...	8.0	176	0	160	30	.4	28	1.3	466	280	713	7.2
03089500 - MILL CREEK NEAR BERLIN CENTER, OHIO (LAT 41 00 01 LONG 080 58 07)												
NOV. 13...	36	--	--	--	--	--	--	--	--	--	475	--
JAN. 06...	25	--	--	79	20	--	8.2	--	--	160	386	7.8
MAR. 24...	19	--	--	--	--	--	--	--	--	--	457	--
MAY 06...	55	--	--	150	20	--	1.6	--	--	260	585	7.8
JULY 13...	1.0	127	0	300	90	.3	1.8	.01	694	400	1030	8.2
SEP. 20...	.89	--	--	--	--	--	--	--	--	--	1130	--
03090500 - MAHONING RIVER BELOW BERLIN DAM NEAR BERLIN CENTER, OHIO (LAT 41 02 54 LONG 081 00 05)												
NOV. 16...	26	107	0	140	26	.3	4.9	.03	362	230	539	7.6
JAN. 15...	270	--	--	110	25	--	8.8	--	--	210	510	7.2
MAR. 22...	460	--	--	--	--	--	--	--	--	--	335	--
MAY 05...	120	--	--	70	25	--	6.3	--	--	140	376	7.3
JULY 12...	87	--	--	110	27	--	4.5	--	--	180	441	7.5
SEP. 17...	114	98	0	120	34	.4	3.5	.22	368	230	563	7.2
03091500 - MAHONING RIVER AT PRICETOWN, OHIO (LAT 41 07 53 LONG 080 58 17)												
NOV. 16...	174	96	0	120	26	.3	1.9	.15	316	200	492	7.3
JAN. 06...	238	--	--	110	25	--	6.8	--	--	210	492	7.4
MAR. 08...	1230	--	--	--	--	--	--	--	--	--	399	--
MAY 06...	117	--	--	68	25	--	7.8	--	--	140	368	7.7
JULY 13...	142	--	--	89	24	--	3.1	--	--	150	380	7.4
SEP. 16...	129	86	0	100	29	.3	2.1	.21	272	180	454	7.1
03092000 - KALE CREEK NEAR PRICETOWN, OHIO (LAT 41 08 23 LONG 080 59 43)												
NOV. 17...	25	--	--	--	--	--	--	--	--	--	366	--
JAN. 06...	35	--	--	100	16	--	7.2	--	--	110	303	7.8
MAR. 24...	23	--	--	--	--	--	--	--	--	--	349	--
MAY 06...	26	--	--	180	34	--	1.6	--	--	230	581	7.1
JULY 13...	1.1	--	--	150	31	--	1.3	--	--	250	626	7.3
SEP. 16...	1.6	160	0	150	71	.3	1.5	.09	460	250	749	7.4

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

BEAVER RIVER BASIN--Continued

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
03092099 - HINKLEY CREEK AT CHARLESTOWN,OHIO (LAT 41 09 16 LONG 081 08 51)												
AUG. 16...	.13	182	0	56	210	.3	.7	.10	572	250	1020	7.6
03092460 - WEST BRANCH MAHONING RIVER BELOW MICHAEL J. KIRWAN DAM AT WAYLAND, OHIO (LAT 41 09 25 LONG 081 04 19)												
NOV. 23...	269	--	--	--	--	--	--	--	--	--	393	--
DEC. 22...	278	--	--	--	--	--	--	--	--	--	387	--
FEB. 22...	33	--	--	52	35	--	3.3	--	--	130	364	7.7
AUG. 20...	76	--	--	60	31	--	1.3	--	--	140	367	7.7
SEP. 23...	129	102	0	56	31	.2	3.0	.06	222	150	372	7.3
03092500 - WEST BRANCH MAHONING R NR NEWTON FALLS, OHIO (LAT 41 10 18 LONG 081 01 16)												
NOV. 19...	249	--	--	--	--	--	--	--	--	--	391	--
DEC. 22...	263	--	--	--	--	--	--	--	--	--	386	--
FEB. 22...	188	--	--	45	25	--	2.9	--	--	100	289	7.8
JUNE 16...	194	--	--	59	32	--	2.7	--	--	130	352	7.4
AUG. 23...	74	--	--	60	31	--	1.5	--	--	140	388	7.5
SEP. 23...	143	95	0	58	31	.2	1.6	.09	222	150	370	7.4
03093000 - EAGLE CREEK AT PHALANX STATION, OHIO (LAT 41 15 40 LONG 080 57 16)												
NOV. 19...	95	--	--	--	--	--	--	--	--	--	328	--
DEC. 21...	106	--	--	--	--	--	--	--	--	--	314	--
FEB. 25...	336	--	--	39	20	--	3.8	--	--	71	222	7.0
APR. 19...	73	--	--	72	24	--	1.7	--	--	140	351	7.7
JUNE 15...	27	--	--	--	--	--	--	--	--	--	423	--
AUG. 16...	10	--	--	60	19	--	1.7	--	--	200	449	7.9
SEP. 09...	9.9	164	0	63	26	.2	1.8	.58	266	200	444	7.6
03095500 - MOSQUITO CREEK BELOW MOSQUITO CREEK DAM NEAR CORTLAND, OHIO (LAT 41 17 59 LONG 080 45 31)												
NOV. 20...	250	--	--	--	--	--	--	--	--	--	248	--
JAN. 20...	21	--	--	38	21	--	3.8	--	--	97	271	6.9
MAR. 17...	27	--	--	--	--	--	--	--	--	--	247	--
MAY 20...	17	--	--	38	17	--	1.8	--	--	82	231	7.3
JULY 22...	131	--	--	39	17	--	2.1	--	--	86	233	7.1
SEP. 08...	71	56	0	39	18	.2	2.5	.21	158	92	238	7.6

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
BEAVER RIVER BASIN--Continued												
03098000 - MAHONING RIVER AT YOUNGSTOWN, OHIO (LAT 41 06 40 LONG 080 40 23)												
NOV. 23...	1010	--	--	--	--	--	--	--	--	--	475	--
JAN. 19...	450	--	--	130	50	--	15	--	--	210	568	7.2
MAR. 16...	2790	--	--	--	--	--	--	--	--	--	384	--
MAY 18...	372	--	--	110	54	--	16	--	--	170	539	6.5
JULY 21...	493	--	--	88	39	--	9.0	--	--	150	432	7.1
SEP. 09...	381	94	0	94	42	.5	10	1.4	302	180	504	7.5
03098500 - MILL CREEK AT YOUNGSTOWN, OHIO (LAT 41 04 19 LONG 080 41 26)												
NOV. 23...	66	--	--	--	--	--	--	--	--	--	545	--
JAN. 19...	14	--	--	140	73	--	8.4	--	--	270	707	7.2
MAR. 16...	202	--	--	--	--	--	--	--	--	--	441	--
MAY 18...	29	--	--	140	51	--	2.0	--	--	240	635	7.7
JULY 20...	7.5	--	--	150	46	--	3.9	--	--	220	622	7.3
SEP. 07...	6.7	143	0	140	46	.5	5.0	3.0	430	240	659	7.2
03099500 - MAHONING RIVER AT LOWELLVILLE, OHIO (LAT 41 02 12 LONG 080 32 11)												
NOV. 17...	1820	84	0	110	31	.5	6.8	.18	264	180	473	6.7
JAN. 18...	--	--	--	110	68	--	27	--	--	220	664	6.7
03102950 - PYMATUNING CREEK AT KINSMAN, OHIO (LAT 41 26 34 LONG 080 35 18)												
NOV. 20...	234	56	0	42	12	.2	2.8	.14	162	89	227	7.0
JAN. 19...	29	--	--	41	20	--	8.1	--	--	130	321	6.9
MAR. 17...	501	--	--	--	--	--	--	--	--	--	196	--
MAY 20...	26	--	--	20	15	--	1.7	--	--	120	288	7.2
JULY 22...	2.4	--	--	16	11	--	1.2	--	--	180	343	7.5
SEP. 08...	.59	194	0	27	23	.1	1.8	.40	240	190	418	7.3
LITTLE BEAVER CREEK BASIN												
03109500 - LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OHIO (LAT 40 40 33 LONG 080 32 27)												
OCT. 26...	257	--	--	--	--	--	--	--	--	--	632	--
NOV. 24...	575	--	--	--	--	--	--	--	--	--	558	--
DEC. 28...	489	--	--	--	--	--	--	--	--	--	567	--
JAN. 21...	291	--	--	--	--	--	--	--	--	--	662	--
FEB. 24...	3180	--	--	130	16	--	7.1	--	--	130	328	6.9
MAR. 25...	735	--	--	--	--	--	--	--	--	--	523	--
APR. 26...	188	--	--	--	--	--	--	--	--	--	639	--
MAY 25...	225	--	--	240	28	--	1.8	--	--	280	622	7.6
JUNE 25...	188	--	--	--	--	--	--	--	--	--	572	--
JULY 26...	100	--	--	230	62	--	1.4	--	--	340	804	7.6
AUG. 19...	41	142	0	250	50	.3	1.4	.26	572	380	833	7.6
25...	58	--	--	--	--	--	--	--	--	--	854	--
SEP. 27...	79	--	--	--	--	--	--	--	--	--	754	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

YELLOW CREEK BASIN

03110000 - YELLOW CREEK NEAR HAMMONDSVILLE, OHIO (LAT 40 32 16 LONG 080 43 31)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 26...	94	93	0	180	18	.1	.7	.02	378	220	455	7.5
DEC. 28...	191	--	--	--	--	--	--	--	--	--	378	--
FEB. 24...	770	--	--	67	9.0	--	5.0	--	--	93	250	6.7
APR. 26...	53	--	--	170	16	--	1.9	--	--	200	487	7.3
JUNE 25...	21	--	--	--	--	--	--	--	--	--	609	--
AUG. 19...	6.0	--	--	310	30	--	.0	--	--	310	743	7.3
25...	7.4	28	0	360	35	.2	.2	.01	622	350	841	7.1

03110600 - NORTH FORK YELLOW CREEK AT HAMMONDSVILLE,OHIO (LAT 40 33 27 LONG 080 42 20)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 19...	2.8	56	0	290	38	.2	.3	.03	536	260	788	6.9

CROSS CREEK BASIN

03111000 - CROSS CREEK AT MINGO JUNCTION, OHIO (LAT 40 19 03 LONG 080 37 45)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 19...	9.5	122	0	960	30	.3	.1	.02	1600	1100	1820	7.7

SHORT CREEK BASIN

03111500 - SHORT CREEK NEAR DILLONVALE, OHIO (LAT 40 11 36 LONG 080 44 04)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
NOV. 18...	158	--	--	--	--	--	--	--	--	--	1760	--
JAN. 22...	99	--	--	1100	43	--	3.7	--	--	1000	1900	8.0
MAR. 10...	272	--	--	--	--	--	--	--	--	--	1610	--
MAY 10...	244	--	--	840	29	--	2.9	--	--	880	1680	7.6
JULY 06...	45	--	--	1400	62	--	.6	--	--	1200	2500	7.5
AUG. 19...	21	--	--	--	--	--	--	--	--	--	2990	--
26...	81	92	0	1600	81	.7	1.2	3.8	2580	1400	2740	6.8
SEP. 22...	35	--	--	--	--	--	--	--	--	--	2620	--

WHEELING CREEK BASIN

03111550 - WHEELING CREEK AT BROOKSIDE, OHIO (LAT 40 04 05 LONG 080 46 49)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 19...	16	58	0	1800	22	1.2	.1	.00	2890	1200	3200	6.8

CAPTINA CREEK BASIN

03114000 - CAPTINA CREEK AT ARMSTRONGS MILLS, OHIO (LAT 39 54 31 LONG 080 55 27)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
JAN. 13...	109	--	--	51	7.9	--	3.8	--	--	160	348	7.6
MAR. 03...	182	--	--	--	--	--	--	--	--	--	322	--
MAY 05...	27	--	--	63	12	--	.5	--	--	190	398	8.0
JUNE 23...	18	--	--	--	--	--	--	--	--	--	423	--
AUG. 18...	1.1	--	--	75	25	--	1.0	--	--	210	476	7.6
SEP. 15...	137	144	0	59	11	.1	3.7	.29	248	180	375	7.8

SUNFISH CREEK BASIN

03114250 - SUNFISH CREEK AT CAMERON, OHIO (LAT 39 46 00 LONG 080 56 09)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 18...	1.4	169	0	56	40	.2	.7	.07	294	200	488	7.5

LITTLE MUSKINGUM RIVER BASIN

03115400 - LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OHIO (LAT 39 33 47 LONG 081 12 14)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
NOV. 09...	152	--	--	--	--	--	--	--	--	--	369	--
JAN. 13...	149	--	--	46	29	--	1.8	--	--	140	344	8.2
MAR. 03...	257	--	--	--	--	--	--	--	--	--	295	--
MAY 05...	49	--	--	39	64	--	.5	--	--	170	486	7.8
JUNE 24...	9.3	--	--	--	--	--	--	--	--	--	614	--
AUG. 19...	2.4	--	--	32	80	--	.7	--	--	180	528	7.7
SEP. 15...	244	80	0	32	34	.1	2.3	.21	186	120	306	7.2

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
DUCK CREEK BASIN												
03115800 - DUCK CREEK AT STANLEYVILLE, OHIO (LAT 39 28 14 LONG 081 24 41)												
AUG. 19...	8.3	60	0	390	30	.5	.6	.02	700	460	936	7.4
MUSKINGUM RIVER BASIN												
03115900 - TUSCARAWAS RIVER NEAR EAST LIBERTY, OHIO (LAT 41 00 25 LONG 081 29 31)												
AUG. 16...	11	226	0	74	29	.2	3.0	.22	356	260	562	7.8
03116000 - TUSCARAWAS RIVER AT CLINTON, OHIO (LAT 40 55 40 LONG 081 37 58)												
OCT. 13...	467	--	--	--	--	--	--	--	--	--	14600	--
DEC. 01...	290	--	--	--	--	--	--	--	--	--	8350	--
JAN. 26...	103	--	--	170	3600	--	3.8	--	--	2800	9510	7.1
MAR. 23...	222	--	--	--	--	--	--	--	--	--	6380	--
MAY 17...	104	--	--	170	4300	--	4.7	--	--	2700	12200	7.1
JULY 15...	65	--	--	180	5200	--	1.9	--	--	3800	14300	6.8
AUG. 16...	64	--	--	--	--	--	--	--	--	--	18900	--
SEP. 20...	59	106	0	210	6000	2.8	27	1.0	10500	3500	16600	6.8
03116100 - LITTLE CHIPPEWA CREEK NEAR SMITHVILLE, OHIO (LAT 40 53 39 LONG 081 48 46)												
AUG. 16...	2.5	350	0	100	58	.5	7.3	32	556	240	882	7.5
03116200 - CHIPPEWA CREEK AT EASTON, OHIO (LAT 40 56 47 LONG 081 44 35)												
DEC. 02...	184	--	--	--	--	--	--	--	--	--	603	--
JAN. 25...	40	--	--	--	--	--	--	--	--	--	2160	--
FEB. 23...	1430	--	--	43	34	--	12	--	--	81	290	7.3
MAR. 23...	272	--	--	--	--	--	--	--	--	--	584	--
MAY 18...	60	--	--	110	91	--	10	--	--	240	803	7.1
JULY 06...	10	--	--	110	190	--	30	--	--	300	1230	7.3
AUG. 16...	5.3	348	0	190	300	4.0	27	15	1060	350	1780	7.3
SEP. 20...	17	--	--	--	--	--	--	--	--	--	1470	--
03117000 - TUSCARAWAS RIVER AT MASSILLON, OHIO (LAT 40 46 13 LONG 081 31 27)												
OCT. 07...	156	--	--	--	--	--	--	--	--	--	6000	--
DEC. 03...	545	--	--	--	--	--	--	--	--	--	3740	--
JAN. 26...	243	--	--	140	2200	--	9.1	--	--	1800	6240	7.1
MAR. 22...	1010	--	--	--	--	--	--	--	--	--	1640	--
MAY 17...	311	--	--	130	1800	--	6.3	--	--	1100	5470	7.1
JULY 15...	142	--	--	140	2100	--	8.8	--	--	1700	6580	6.9
SEP. 13...	310	94	0	66	1100	.3	.0	.41	2020	730	3620	6.7
03117500 - SANDY CREEK AT WAYNESBURG, OHIO (LAT 40 40 21 LONG 081 15 36)												
OCT. 08...	49	137	0	150	29	.2	1.4	.00	394	260	586	7.8
DEC. 03...	394	--	--	--	--	--	--	--	--	--	280	--
FEB. 08...	262	--	--	54	14	--	8.6	--	--	97	263	7.5
AUG. 09...	33	--	--	110	17	--	.8	--	--	230	504	8.0
SEP. 09...	24	155	0	160	26	.2	1.2	.21	400	290	609	7.9

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
MUSKINGUM RIVER BASIN--Continued												
03118000 - MIDDLE BRANCH NIMISHILLEN CREEK AT CANTON, O. (LAT 40 50 29 LONG 081 21 14)												
OCT. 07...	8.4	--	--	--	--	--	--	--	--	--	768	--
NOV. 30...	157	--	--	--	--	--	--	--	--	--	485	--
JAN. 27...	12	--	--	110	63	--	9.3	--	--	350	770	8.2
MAR. 22...	90	--	--	--	--	--	--	--	--	--	676	--
MAY 06...	41	--	--	120	48	--	4.0	--	--	310	714	7.6
18...	16	--	--	--	--	--	--	--	--	--	699	--
JULY 07...	3.0	--	--	120	48	--	3.5	--	--	330	730	7.5
AUG. 27...	11	180	0	110	49	.2	3.2	.50	412	280	645	7.2
SEP. 13...	14	--	--	--	--	--	--	--	--	--	536	--
03118500 - NIMISHILLEN CREEK AT NORTH INDUSTRY, OHIO (LAT 40 44 03 LONG 081 21 08)												
OCT. 08...	93	242	9	58	160	.8	21	6.0	830	470	1300	8.3
DEC. 03...	205	--	--	--	--	--	--	--	--	--	969	--
FEB. 08...	199	--	--	150	160	--	27	--	--	330	1070	8.0
APR. 02...	229	--	--	190	140	--	11	--	--	390	1100	7.0
JUNE 04...	106	--	--	--	--	--	--	--	--	--	1220	--
AUG. 09...	73	--	--	220	140	--	31	--	--	450	1220	7.1
SEP. 09...	77	282	0	220	180	.7	16	6.5	864	460	1360	7.2
03119700 - CONOTTON CREEK AT JEWETT, OHIO (LAT 40 21 59 LONG 081 00 13)												
AUG. 19...	.58	175	0	600	26	.4	6.6	1.2	1130	750	1370	8.0
03120500 - MCGUIRE CREEK BELOW LEESVILLE DAM NEAR LEESVILLE, OHIO (LAT 40 28 13 LONG 081 11 48)												
NOV. 19...	193	--	--	--	--	--	--	--	--	--	176	--
JAN. 21...	28	--	--	25	7.1	--	4.0	--	--	75	190	8.0
MAR. 18...	234	--	--	--	--	--	--	--	--	--	159	--
MAY 18...	71	--	--	29	6.0	--	4.3	--	--	58	150	7.2
JULY 20...	10	--	--	28	6.0	--	3.1	--	--	66	162	7.0
SEP. 07...	3.0	56	0	18	6.4	.1	4.8	.15	103	68	161	6.8
03121500 - INDIAN FORK BELOW ATWOOD DAM NEAR NEW CUMBERLAND, OHIO (LAT 40 31 31 LONG 081 17 18)												
NOV. 19...	244	--	--	--	--	--	--	--	--	--	270	--
JAN. 21...	36	--	--	51	27	--	5.3	--	--	94	285	8.1
MAR. 18...	476	--	--	--	--	--	--	--	--	--	227	--
MAY 18...	65	--	--	46	23	--	5.0	--	--	72	226	7.1
JULY 20...	10	--	--	36	22	--	4.2	--	--	85	245	7.0
SEP. 07...	3.0	69	0	25	23	.2	8.0	.30	150	89	248	6.7
03122500 - TUSCARAWAS RIVER BELOW DOVER DAM NEAR DOVER, OHIO (LAT 40 31 47 LONG 081 25 48)												
OCT. 30...	912	129	0	230	480	.4	8.6	.15	1300	570	2060	6.8
DEC. 29...	1660	--	--	--	--	--	--	--	--	--	876	--
FEB. 26...	5380	--	--	59	140	--	8.3	--	--	190	726	7.9
APR. 21...	769	--	--	180	590	--	8.9	--	--	620	2220	8.2
JUNE 17...	551	--	--	--	--	--	--	--	--	--	1990	--
AUG. 12...	302	--	--	200	970	--	7.6	--	--	870	3620	7.0
SEP. 21..	426	143	0	190	910	1.1	7.6	.60	1960	810	3170	7.1

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
MUSKINGUM RIVER BASIN--Continued												
03123000 - SUGAR CREEK AB BEACH CITY DAM AT BEACH CITY,O (LAT 40 39 24 LONG 081 34 37)												
NOV. 23...	95	--	--	--	--	--	--	--	--	--	506	--
JAN. 28...	48	--	--	--	--	--	--	--	--	--	567	--
FEB. 26...	466	--	--	62	22	--	16	--	--	130	347	8.0
JUNE 17...	24	--	--	80	38	--	10	--	--	230	564	7.4
AUG. 12...	13	--	--	61	51	--	3.9	--	--	240	601	7.6
SEP. 14...	59	152	0	120	32	.2	5.7	.76	358	250	577	7.2
03124000 - SUGAR CREEK BL BEACH CITY DAM NR BEACH CITY,O (LAT 40 38 08 LONG 081 33 11)												
NOV. 23...	184	--	--	--	--	--	--	--	--	--	625	--
JAN. 28...	92	--	--	190	25	--	9.9	--	--	320	671	7.9
MAR. 26...	352	--	--	--	--	--	--	--	--	--	530	--
MAY 20...	130	--	--	260	19	--	6.8	--	--	320	682	7.2
JULY 23...	28	--	--	300	32	--	2.0	--	--	410	839	7.1
SEP. 14...	102	100	0	290	33	.5	3.6	.43	606	440	907	6.9
03124500 - SUGAR CREEK AT STRASBURG, OHIO (LAT 40 35 15 LONG 081 31 24)												
OCT. 30...	48	--	--	--	--	--	--	--	--	--	774	--
NOV. 25...	109	--	--	--	--	--	--	--	--	--	676	--
DEC. 29...	216	--	--	--	--	--	--	--	--	--	549	--
JAN. 28...	109	--	--	200	23	--	9.1	--	--	340	700	8.1
MAR. 26...	358	--	--	--	--	--	--	--	--	--	556	--
MAY 20...	149	--	--	250	19	--	7.0	--	--	320	665	7.0
JULY 23...	28	--	--	320	30	--	1.8	--	--	430	860	7.3
SEP. 14...	61	121	0	260	31	.4	3.6	.45	522	360	771	7.1
03125000 - HOME CREEK NEAR NEW PHILADELPHIA, OHIO (LAT 40 28 06 LONG 081 24 10)												
NOV. 16...	2.4	--	--	--	--	--	--	--	--	--	504	--
JAN. 21...	.38	--	--	360	17	--	6.7	--	--	340	704	8.0
MAR. 18...	1.5	--	--	--	--	--	--	--	--	--	558	--
MAY 18...	.73	--	--	400	17	--	3.1	--	--	360	732	7.1
JULY 20...	.04	--	--	430	33	--	8.5	--	--	470	994	6.7
SEP. 07...	.06	--	--	--	--	--	--	--	--	--	1040	--
03126000 - STILLWATER CREEK AT PIEDMONT, OHIO (LAT 40 11 41 LONG 081 12 56)												
OCT. 12...	18	151	0	239	17	.2	1.1	.00	1250	860	1460	8.1
DEC. 17...	518	--	--	--	--	--	--	--	--	--	786	--
FEB. 17...	41	--	--	600	21	--	1.8	--	--	710	1210	7.4
APR. 15...	27	--	--	700	15	--	.7	--	--	800	1390	7.7
JUNE 10...	75	--	--	--	--	--	--	--	--	--	1030	--
AUG. 09...	13	--	--	540	13	--	1.5	--	--	680	1180	7.3
SEP. 10...	10	182	0	570	16	.4	2.6	.39	966	700	1230	8.1

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

MUSKINGUM RIVER BASIN--Continued

03127000 - STILLWATER CREEK AT TIPPECANOE, OHIO (LAT 40 16 13 LONG 081 17 26)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 12...	35	120	0	350	13	.3	3.3	.18	636	430	862	8.2
DEC. 16...	970	--	--	--	--	--	--	--	--	--	675	--
FEB. 17...	106	--	--	290	13	--	2.9	--	--	360	714	8.2
APR. 15...	57	--	--	410	14	--	.9	--	--	490	936	8.2
JUNE 10...	122	--	--	--	--	--	--	--	--	--	923	--
AUG. 09...	24	--	--	430	14	--	1.4	--	--	550	1010	7.4
SEP. 10...	16	164	0	600	19	.4	1.4	.28	1020	720	1270	7.4

03127500 - STILLWATER CREEK AT UHRICHSVILLE, OHIO (LAT 40 23 10 LONG 081 20 50)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 27...	42	113	0	334	28	.2	1.6	.04	650	420	896	7.1
DEC. 15...	1260	--	--	--	--	--	--	--	--	--	480	--
FEB. 17...	182	--	--	200	33	--	3.8	--	--	270	634	8.1
APR. 15...	91	--	--	310	28	--	1.4	--	--	390	828	8.0
JUNE 10...	166	--	--	--	--	--	--	--	--	--	911	--
AUG. 09...	31	--	--	400	22	--	1.0	--	--	520	979	7.3
SEP. 21...	146	102	0	360	19	.3	2.1	.22	630	450	876	7.0

03128500 LITTLE STILLWATER CREEK BELOW TAPPAN DAM, AT TAPPAN, OHIO (LAT 40 21 25 LONG 081 13 49)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
NOV. 18...	290	--	--	--	--	--	--	--	--	--	599	--
JAN. 22...	60	--	--	260	9.5	--	3.9	--	--	360	684	8.3
MAY 07...	116	--	--	170	9.0	--	2.5	--	--	280	571	7.5
JULY 06...	11	--	--	210	8.4	--	4.2	--	--	300	587	7.3
AUG. 26...	2.5	130	0	180	8.4	.2	4.9	1.1	414	300	581	6.8
SEP. 22...	8.8	--	--	--	--	--	--	--	--	--	618	--

03129000 - TUSCARAWAS RIVER AT NEWCOMERSTOWN, OHIO (LAT 40 15 41 LONG 081 36 33)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 01...	886	128	0	180	290	.5	7.9	.18	928	460	1460	7.1
DEC. 01...	4680	--	--	--	--	--	--	--	--	--	1150	--
FEB. 12...	2070	--	--	160	330	--	11	--	--	440	1460	6.7
JUNE 01...	1200	--	--	240	280	--	9.2	--	--	430	1460	7.5
AUG. 02...	481	--	--	230	720	--	6.6	--	--	740	2780	6.9
SEP. 09...	361	99	0	230	810	1.5	2.8	1.2	1770	710	2920	6.8

03129400 - BLACK FORK ABOVE CHARLES MILL DAM NEAR MIFFLIN, OHIO (LAT 40 47 54 LONG 082 23 21)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 17...	9.0	256	0	88	26	.7	2.0	.38	416	230	623	7.4

03130000 - BLACK FORK BELOW CHARLES MILL DAM NEAR MIFFLIN, OHIO (LAT 40 44 16 LONG 082 21 48)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
NOV. 17...	266	--	--	--	--	--	--	--	--	--	544	--
JAN. 12...	186	--	--	71	23	--	13	--	--	230	505	7.4
MAR. 02...	1190	--	--	--	--	--	--	--	--	--	281	--
APR. 20...	79	--	--	67	16	--	2.8	--	--	200	421	8.3
JUNE 15...	44	--	--	--	--	--	--	--	--	--	441	--
AUG. 09...	16	--	--	70	26	--	3.7	--	--	200	458	7.2
SEP. 14...	41	152	0	70	26	.2	3.9	.53	280	200	450	7.3

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

MUSKINGUM RIVER BASIN--Continued

03130500 - TOUBY RUN AT MANSFIELD, OHIO (LAT 40 45 53 LONG 082 32 43)

DATE	DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
NOV. 09...	.75	290	0	140	180	.3	6.5	1.6	696	410	1190	8.1
MAR. 02...	39	--	--	65	160	--	8.6	--	--	260	899	8.3
APR. 13...	.93	--	--	110	230	--	3.4	--	--	400	1230	8.4
JUNE 18...	.62	--	--	--	--	--	--	--	--	--	1330	--
AUG. 04...	1.5	--	--	80	200	--	2.1	--	--	350	1120	7.2
SEP. 27...	.59	272	0	92	170	.3	3.9	1.3	586	360	1080	8.0

03131300 - BLACK FORK AT MELCO, OHIO (LAT 40 41 52 LONG 082 21 37)

DATE	DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
AUG. 17...	46	178	0	92	41	1.0	13	2.1	408	230	623	7.1

03132000 - CLEAR FORK AT BUTLER, OHIO (LAT 40 35 37 LONG 082 25 20)

DATE	DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
NOV. 17...	46	--	--	--	--	--	--	--	--	--	451	--
JAN. 12...	70	--	--	37	14	--	5.0	--	--	220	434	7.6
MAR. 02...	200	--	--	--	--	--	--	--	--	--	335	--
APR. 20...	60	--	--	41	15	--	3.0	--	--	210	418	8.2
JUNE 15...	57	--	--	--	--	--	--	--	--	--	467	--
AUG. 09...	32	--	--	35	16	--	3.0	--	--	230	446	8.0
17...	30	216	12	35	16	.1	2.9	.52	263	230	449	8.5
SEP. 13...	24	--	--	--	--	--	--	--	--	--	458	--

03133500 - CLEAR FORK BELOW PLEASANT HILL DAM, NEAR PERRYSVILLE, OHIO (LAT 40 37 13 LONG 082 19 28)

DATE	DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
NOV. 18...	92	--	--	--	--	--	--	--	--	--	385	--
JAN. 13...	87	--	--	34	16	--	7.0	--	--	170	362	7.7
MAR. 10...	530	--	--	--	--	--	--	--	--	--	285	--
JUNE 16...	63	--	--	37	13	--	3.2	--	--	150	332	7.7
AUG. 10...	51	158	4	30	13	.2	1.8	.22	208	140	339	8.3

03135000 - LAKE FORK BELOW MOHICANVILLE DAM NEAR MOHICANVILLE, OHIO (LAT 40 43 24 LONG 082 09 18)

DATE	DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
NOV. 18...	97	--	--	--	--	--	--	--	--	--	559	--
JAN. 13...	74	--	--	88	36	--	14	--	--	260	578	8.4
MAR. 11...	331	--	--	--	--	--	--	--	--	--	344	--
APR. 21...	71	--	--	90	44	--	8.5	--	--	250	614	7.4
JUNE 17...	31	--	--	76	40	--	5.3	--	--	280	622	7.8
AUG. 10...	14	241	0	72	50	.3	6.5	2.0	372	260	653	7.4
SEP. 14...	115	--	--	--	--	--	--	--	--	--	397	--

03136000 - MOHICAN RIVER AT GREER, OHIO (LAT 40 30 53 LONG 082 11 44)

DATE	DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
NOV. 16...	960	--	--	--	--	--	--	--	--	--	552	--
DEC. 28...	842	--	--	--	--	--	--	--	--	--	579	--
FEB. 17...	474	--	--	53	44	--	11	--	--	200	495	7.2
MAR. 29...	1040	--	--	--	--	--	--	--	--	--	442	--
MAY 27...	710	--	--	59	23	--	6.6	--	--	200	449	7.4
JULY 27...	282	--	--	50	23	--	4.2	--	--	190	447	7.5
SEP. 20...	181	197	0	53	26	.2	6.0	1.0	286	210	488	7.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
MUSKINGUM RIVER BASIN--Continued												
03136400 - NORTH BRANCH KOKOSING R NR FREDERICKTOWN,O (LAT 40 30 08 LONG 082 34 18)												
AUG. 19...	2.3	259	0	45	12	.2	.9	.05	304	250	488	8.0
03136500 - KOKOSING RIVER AT MOUNT VERNON, OHIO (LAT 40 24 20 LONG 082 30 00)												
NOV. 04...	153	--	--	--	--	--	--	--	--	--	458	--
DEC. 22...	248	--	--	--	--	--	--	--	--	--	440	--
MAR. 05...	274	--	--	37	14	--	8.2	--	--	170	355	8.3
APR. 16...	92	--	--	68	22	--	3.3	--	--	200	436	8.2
JUNE 18...	49	--	--	--	--	--	--	--	--	--	538	--
AUG. 05...	30	--	--	59	22	--	1.6	--	--	190	408	8.3
SEP. 28...	21	270	0	55	20	.2	1.8	.21	314	240	541	8.1
03136900 - JELLOWAY CREEK AT HOWARD, OHIO (LAT 40 24 24 LONG 082 19 15)												
AUG. 19...	8.6	148	0	14	16	.1	4.2	.05	186	150	307	7.5
03137000 - KOKOSING RIVER AT MILLWOOD, OHIO (LAT 40 23 51 LONG 082 17 09)												
NOV. 18...	194	--	--	--	--	--	--	--	--	--	473	--
DEC. 30...	281	--	--	--	--	--	--	--	--	--	446	--
MAR. 05...	530	--	--	32	19	--	8.8	--	--	160	358	7.7
APR. 16...	233	--	--	55	20	--	3.9	--	--	210	440	8.4
JUNE 22...	128	--	--	--	--	--	--	--	--	--	491	--
AUG. 05...	94	--	--	48	23	--	2.3	--	--	230	462	8.5
SEP. 28...	63	234	0	46	25	.2	3.9	.45	282	240	503	7.7
03138500 - WALHONDING RIVER BL MOHAWK DAM AT NELLIE,OHIO (LAT 40 20 29 LONG 082 03 56)												
OCT. 26...	567	--	--	--	--	--	--	--	--	--	509	--
DEC. 23...	3500	--	--	--	--	--	--	--	--	--	401	--
FEB. 11...	815	--	--	40	33	--	8.6	--	--	180	479	7.4
MAR. 25...	2390	--	--	--	--	--	--	--	--	--	416	--
MAY 24...	830	--	--	49	23	--	5.5	--	--	200	439	7.9
JULY 26...	442	--	--	54	25	--	4.2	--	--	200	467	7.5
SEP. 10...	216	210	0	48	28	.2	4.6	.55	288	220	488	7.7
03139000 - KILLBUCK CREEK AT KILLBUCK, OHIO (LAT 40 29 41 LONG 081 59 12)												
NOV. 10...	180	--	--	--	--	--	--	--	--	--	535	--
DEC. 29...	298	--	--	--	--	--	--	--	--	--	499	--
FEB. 23...	3320	--	--	40	17	--	12	--	--	89	247	8.0
MAR. 29...	471	--	--	--	--	--	--	--	--	--	456	--
JUNE 02...	144	--	--	59	24	--	5.1	--	--	220	484	7.5
JULY 27...	106	--	--	66	21	--	4.2	--	--	200	451	8.2
AUG. 20...	45	210	10	58	30	.2	6.2	1.2	334	250	532	8.4

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
MUSKINGUM RIVER BASIN--Continued												
03140000 - MILL CREEK NEAR COSHOCTON, OHIO (LAT 40 21 46 LONG 081 51 45)												
NOV. 02...	7.9	--	--	--	--	--	--	--	--	--	706	--
DEC. 31...	18	--	--	--	--	--	--	--	--	--	297	--
MAR. 05...	37	--	--	45	11	--	8.4	--	--	99	253	7.5
MAY 06...	1140	--	--	68	7.0	--	2.3	--	--	72	241	6.8
JULY 01...	1.1	--	--	260	14	--	1.7	--	--	320	682	7.2
SEP. 09...	1.2	108	0	33	16	.2	2.4	.17	194	120	293	8.0
03140500 - MUSKINGUM RIVER NEAR COSHOCTON, OHIO (LAT 40 14 54 LONG 081 52 23)												
NOV. 03...	5890	--	--	--	--	--	--	--	--	--	696	--
JAN. 04...	5870	--	--	110	110	--	9.5	--	--	270	768	6.9
MAR. 01...	19100	--	--	--	--	--	--	--	--	--	494	--
MAY 05...	2020	--	--	160	220	--	5.9	--	--	410	1230	7.3
JULY 01...	1420	--	--	160	300	--	2.3	--	--	440	1470	7.1
SEP. 01...	514	120	0	140	190	.6	3.9	.44	628	320	1070	7.0
03140700 BUFFALO FORK (HEAD OF WILLS CREEK) AT PLEASANT CITY, OHIO (LAT 39 54 15 LONG 081 33 14)												
AUG. 20...	1.1	125	0	880	28	.6	.3	.05	1710	1100	1900	7.4
03140800 - BUFFALO CREEK AT PLEASANT CITY, OHIO (LAT 39 54 10 LONG 081 33 03)												
AUG. 20...	.01	136	0	228	25	1.0	8.7	1.4	478	340	760	7.6
03141500 - SENECA FORK BELOW SENECAVILLE DAM NEAR SENECAVILLE, OHIO (LAT 39 55 28 LONG 081 26 17)												
NOV. 10...	471	--	--	--	--	--	--	--	--	--	348	--
JAN. 14...	5.3	--	--	62	5.3	--	2.8	--	--	180	375	7.7
MAR. 04...	589	--	--	--	--	--	--	--	--	--	348	--
MAY 06...	6.9	--	--	60	6.4	--	1.8	--	--	170	364	8.4
JULY 01...	5.0	--	--	59	6.1	--	.8	--	--	190	356	8.3
AUG. 20...	4.2	150	0	56	5.9	.2	1.8	.32	208	140	362	7.5
SEP. 16...	4.6	--	--	--	--	--	--	--	--	--	338	--
03141900 - LEATHERWOOD CREEK NEAR CAMBRIDGE, OHIO (LAT 40 01 18 LONG 081 32 51)												
AUG. 20...	1.1	156	0	410	21	.2	1.6	.09	788	450	1070	8.1
03142000 - WILLS CREEK AT CAMBRIDGE, OHIO (LAT 40 00 52 LONG 081 35 14)												
OCT. 06...	13	100	0	480	33	.5	3.7	.24	866	520	1130	7.1
DEC. 09...	137	--	--	--	--	--	--	--	--	--	567	--
FEB. 11...	607	--	--	66	8.1	--	9.6	--	--	160	351	8.1
APR. 07...	118	--	--	280	21	--	2.5	--	--	370	804	7.5
JUNE 03...	78	--	--	--	--	--	--	--	--	--	792	--
JULY 29...	23	--	--	580	27	--	4.3	--	--	680	1380	7.1
SEP. 08...	8.3	138	0	490	31	.6	2.1	.37	914	560	1170	7.4

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

MUSKINGUM RIVER BASIN--Continued

03142295 - SALT FORK BL SALT FORK DAM NR. CAMBRIDGE, OHIO (LAT 40 06 15 LONG 081 33 15)

DATE	DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
NOV. 03...	352	--	--	--	--	--	--	--	--	--	274	--
JAN. 29...	254	--	--	62	--	--	4.3	--	--	110	282	7.2
APR. 08...	288	--	--	48	10	--	4.9	--	--	42	219	7.7
JUNE 16...	63	--	--	--	--	--	--	--	--	--	254	--
JULY 29...	7.3	56	0	58	7.4	.2	1.1	.00	164	110	245	7.7

03143500 - WILLS CREEK BELOW WILLS CREEK DAM AT WILLS CREEK, OHIO (LAT 40 09 34 LONG 081 50 51)

DATE	DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT. 26...	128	--	--	--	--	--	--	--	--	--	858	--
DEC. 22...	1520	--	--	--	--	--	--	--	--	--	396	--
FEB. 12...	1270	--	--	79	17	--	4.0	--	--	140	412	7.6
MAR. 04...	4780	--	--	--	--	--	--	--	--	--	386	--
MAY 25...	360	--	--	130	15	--	2.2	--	--	200	460	7.3
JULY 26...	83	--	--	260	28	--	1.1	--	--	330	760	8.0
SEP. 10...	42	90	0	360	39	.4	1.4	.13	668	420	910	8.0

03144000 - WAKATOMIKA CREEK NEAR FRAZEYSBURG OHIO (LAT 40 07 57 LONG 082 08 53)

DATE	DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
NOV. 19...	178	56	0	24	44	.1	3.7	.00	204	99	300	7.2
DEC. 24...	468	--	--	--	--	--	--	--	--	--	260	--
MAR. 01...	310	--	--	24	32	--	5.0	--	--	76	230	7.5
APR. 20...	51	--	--	23	44	--	1.8	--	--	110	327	7.7
JUNE 09...	97	--	--	--	--	--	--	--	--	--	294	--
AUG. 06...	12	118	0	17	49	.1	1.1	.02	196	140	403	7.6

03144500 - MUSKINGUM RIVER AT DRESDEN, OHIO (LAT 40 07 13 LONG 081 59 59)

DATE	DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT. 13...	2360	155	0	180	330	.6	5.0	.14	932	460	1560	7.2
DEC. 01...	7710	--	--	--	--	--	--	--	--	--	782	--
FEB. 16...	5330	--	--	110	180	--	10	--	--	310	961	7.0
APR. 08...	4610	--	--	180	220	--	8.7	--	--	410	1200	7.2
AUG. 02...	1240	130	0	160	250	.6	3.7	.22	866	420	1350	7.1

03145000 - SOUTH FORK LICKING RIVER NEAR HEBRON, OHIO (LAT 39 59 19 LONG 082 28 30)

DATE	DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
NOV. 12...	18	--	--	--	--	--	--	--	--	--	641	--
APR. 15...	30	--	--	78	34	--	8.3	--	--	250	574	7.9
JUNE 08...	16	--	--	--	--	--	--	--	--	--	606	--
AUG. 02...	16	--	--	60	32	--	4.8	--	--	260	562	7.4
SEP. 29...	8.4	246	0	75	41	1.1	6.7	2.5	358	270	664	7.3

03147500 - LICKING RIVER BELOW DILLON DAM NEAR DILLON FALLS, OHIO (LAT 39 50 18 LONG 082 04 50)

DATE	DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
NOV. 17...	1200	--	--	--	--	--	--	--	--	--	461	--
FEB. 26...	4000	--	--	35	14	--	8.7	--	--	110	274	7.2
APR. 15...	109	--	--	66	29	--	7.7	--	--	240	522	8.5
JUNE 14...	235	--	--	--	--	--	--	--	--	--	440	--
AUG. 10...	106	--	--	66	47	--	8.0	--	--	240	570	7.4

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

MUSKINGUM RIVER BASIN—Continued

03147900 - TIMBER RUN NEAR ZANESVILLE,OHIO (LAT 39 57 00 LONG 082 03 07)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 19...	.03	135	0	50	120	.2	.5	.02	384	180	696	7.2

03148300 - MOXAHALA CREEK AT ROSEVILLE, OHIO (LAT 39 48 38 LONG 082 04 13)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 20...	7.0	0	0	2100	46	1.4	.5	.46	3120	1600	3410	2.8

03148400 - MOXAHALA CREEK AT ROBERTS, OHIO (LAT 39 51 17 LONG 082 03 23)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 20...	7.3	0	0	2000	52	1.1	.5	.52	2950	1600	3310	2.9

03148600 - MOXAHALA CREEK NEAR ZANESVILLE, OHIO (LAT 39 53 48 LONG 082 00 20)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 20...	10	0	0	1300	69	1.1	.5	.07	1910	1100	2300	3.1

03149500 - SALT CREEK NEAR CHANDLERSVILLE, OHIO (LAT 39 54 31 LONG 081 51 38)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 19...	.86	149	0	46	38	.3	1.1	.05	280	170	440	7.3

03150000 - MUSKINGUM RIVER AT MCCONNELSVILLE, OHIO (LAT 39 38 42 LONG 081 51 00)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
NOV. 27...	5560	122	0	130	100	.3	5.5	.10	426	290	776	8.0
FEB. 25...	29300	--	--	57	35	--	8.2	--	--	120	344	6.7
APR. 14...	3850	--	--	150	130	--	5.3	--	--	320	903	7.3
AUG. 11...	1210	132	0	180	210	.8	3.9	.27	784	400	1200	7.2

LITTLE HOCKING RIVER BASIN

03155800 - LITTLE HOCKING RIVER NR LITTLE HOCKING,OHIO (LAT 39 17 30 LONG 081 41 17)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 18...	.33	118	0	44	9.8	.0	1.8	.14	194	120	307	7.9

HOCKING RIVER BASIN

03156000 - HUNTERS RUN AT LANCASTER, OHIO (LAT 39 41 57 LONG 082 37 18)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 02...	2.6	322	0	57	18	.4	4.3	1.2	370	330	635	7.8
NOV. 10...	4.7	--	--	--	--	--	--	--	--	--	598	--
JAN. 07...	13	--	--	70	15	--	9.1	--	--	220	463	8.3
MAR. 01...	14	--	--	--	--	--	--	--	--	--	454	--
MAY 03...	4.3	--	--	70	15	--	4.4	--	--	300	573	7.6
JUNE 29...	.55	--	--	--	--	--	--	--	--	--	554	--
SEP. 03...	1.6	--	--	50	13	--	2.0	--	--	290	522	8.0

03156400 - HOCKING RIVER AT LANCASTER, OHIO (LAT 39 42 24 LONG 082 36 03)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 02...	25	268	0	65	27	.4	8.0	1.2	368	280	614	7.5
NOV. 09...	26	--	--	--	--	--	--	--	--	--	1640	--
JAN. 08...	58	--	--	95	17	--	12	--	--	300	588	8.4
MAR. 01...	61	--	--	--	--	--	--	--	--	--	530	--
JUNE 22...	12	--	--	100	240	--	7.5	--	--	470	1280	8.0
SEP. 03...	72	--	--	28	88	--	8.6	--	--	130	513	7.1

03156700 - RUSH CREEK NEAR SUGAR GROVE,OHIO (LAT 39 38 17 LONG 082 30 42)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 17...	10	44	0	320	69	.5	3.1	.02	634	410	909	6.4

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DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
HOCKING RIVER BASIN--Continued												
03157000 - CLEAR CREEK NEAR ROCKBRIDGE, OHIO (LAT 39 35 18 LONG 082 34 43)												
JAN. 08...	73	--	--	54	11	--	12	--	--	230	452	7.5
MAR. 02...	113	--	--	--	--	--	--	--	--	--	406	--
MAY 06...	215	--	--	41	7.4	--	2.0	--	--	150	306	7.2
JUNE 22...	41	--	--	--	--	--	--	--	--	--	307	--
AUG. 13...	18	--	--	25	6.4	--	1.5	--	--	180	348	7.8
03157500 - HOCKING RIVER AT ENTERPRISE, OHIO (LAT 39 33 54 LONG 082 28 29)												
DEC. 23...	2190	84	0	61	28	.2	8.6	1.7	242	150	369	7.8
JAN. 05...	860	--	--	72	32	--	10	--	--	170	413	7.4
MAR. 02...	644	--	--	--	--	--	--	--	--	--	489	--
JUNE 23...	93	--	--	150	56	--	8.3	--	--	250	617	7.4
AUG. 16...	54	--	--	130	91	--	5.1	--	--	300	813	7.8
03158200 - MONDAY CREEK AT DOANVILLE, OHIO (LAT 39 26 07 LONG 082 11 31)												
OCT. 02...	20	0	0	570	168	.7	.8	.00	1050	552	1670	3.3
AUG. 17...	7.1	0	0	810	89	.5	.0	.19	1250	440	1880	3.1
03159000 - SUNDAY CREEK AT GLOUSTER, OHIO (LAT 39 30 03 LONG 082 05 07)												
NOV. 17...	72	--	--	--	--	--	--	--	--	--	570	--
JAN. 11...	68	--	--	220	44	--	3.7	--	--	250	682	5.2
MAR. 04...	120	--	--	--	--	--	--	--	--	--	520	--
JUNE 23...	11	--	--	1400	39	--	.1	--	--	630	3060	2.6
AUG. 27...	2.8	0	0	1500	47	.5	.0	.00	2110	660	3090	2.7
03159500 - HOCKING RIVER AT ATHENS, OHIO (LAT 39 19 45 LONG 082 05 17)												
OCT. 16...	516	80	0	220	65	.2	3.2	1.0	496	300	774	7.5
03159520 - FEDERAL CREEK NEAR STEWART OHIO (LAT 39 20 30 LONG 081 53 04)												
AUG. 17...	4.3	166	0	270	50	.3	1.1	.03	636	410	901	7.9
SHADE RIVER BASIN												
03159540 - SHADE RIVER NEAR CHESTER, OHIO (LAT 39 03 49 LONG 081 52 55)												
OCT. 20...	26	91	0	130	17	.2	1.2	.00	294	200	454	7.9
NOV. 19...	112	--	--	--	--	--	--	--	--	--	355	--
JAN. 12...	103	--	--	83	9.5	--	2.5	--	--	150	344	8.3
MAR. 09...	234	--	--	--	--	--	--	--	--	--	274	--
MAY 04...	64	--	--	110	15	--	.9	--	--	180	430	8.2
JUNE 24...	8.0	--	--	--	--	--	--	--	--	--	526	--
AUG. 12...	22	--	--	110	12	--	1.8	--	--	170	378	8.0
LEADING CREEK BASIN												
03160050 - LEADING CREEK NEAR MIDDLEPORT,OHIO (LAT 39 00 31 LONG 082 05 08												
AUG. 18...	3.6	90	0	110	46	.1	1.1	.05	332	190	521	7.1
RACCOON CREEK BASIN												
03201900 - RACCOON CREEK NEAR PRATTSVILLE,OHIO (LAT 39 14 20 LONG 082 17 10)												
AUG. 18...	11	0	0	210	84	.5	1.1	.03	416	190	719	3.9

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

LITTLE SCIOTO RIVER BASIN

03216700 - LITTLE SCIOTO RIVER AT SCIOTOVILLE, OHIO (LAT 38 46 19 LONG 082 52 38)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 23...	39	48	0	36	14	.0	4.0	.07	126	71	210	6.9

SCIOTO RIVER BASIN

03217400 - SCIOTO RIVER NEAR KENTON,OHIO (LAT 40 38 50 LONG 083 38 20)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 20...	7.2	288	0	220	14	.7	.9	.10	576	450	855	7.5

03217500 - SCIOTO RIVER AT LARUE,OHIO (LAT 40 34 28 LONG 083 23 15)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 20...	12	289	0	160	19	.7	3.7	.93	490	360	762	7.3

03217600 - RUSH CREEK NEAR LARUE, OHIO (LAT 40 33 33 LONG 083 19 57)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 20...	.04	386	0	110	15	.6	2.0	.17	420	360	683	7.7

03218000 - LITTLE SCIOTO RIVER ABOVE MARION, OHIO (LAT 40 37 43 LONG 083 10 11)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
NOV. 10...	3.5	--	--	--	--	--	--	--	--	--	700	--
DEC. 21...	29	--	--	--	--	--	--	--	--	--	660	--
MAR. 04...	109	--	--	80	24	--	35	--	--	280	553	8.3
APR. 12...	12	--	--	140	26	--	15	--	--	310	633	8.3
JUNE 07...	361	--	--	--	--	--	--	--	--	--	361	--
AUG. 04...	1.8	--	--	120	25	--	3.7	--	--	280	584	7.7

03219500 - SCIOTO RIVER NEAR PROSPECT, OHIO (LAT 40 25 10 LONG 083 11 50)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 21...	40	--	--	--	--	--	--	--	--	--	967	--
DEC. 14...	589	--	--	--	--	--	--	--	--	--	720	--
FEB. 17...	282	--	--	100	35	--	17	--	--	220	547	8.3
MAR. 30...	319	--	--	--	--	--	--	--	--	--	1480	--
MAY 20...	404	--	--	140	24	--	61	--	--	340	692	8.4
JULY 09...	51	--	--	150	28	--	12	--	--	360	752	7.5
AUG. 31...	19	236	16	190	48	1.0	12	5.6	542	330	889	8.3

03221000 - SCIOTO RIVER BL O'SHAUGHNESSY DAM NR DUBLIN, O (LAT 40 08 36 LONG 083 07 14)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
NOV. 10...	13	--	--	--	--	--	--	--	--	--	777	--
DEC. 18...	519	--	--	--	--	--	--	--	--	--	802	--
FEB. 17...	480	--	--	92	29	--	16	--	--	200	492	8.0
APR. 02...	385	--	--	120	25	--	34	--	--	320	656	7.8
JUNE 03...	257	--	--	--	--	--	--	--	--	--	653	--
JULY 19...	198	--	--	94	17	--	27	--	--	260	436	7.9
SEP. 30...	44	202	0	130	23	.4	6.6	.43	368	290	420	7.5

03223000 - OLENTANGY RIVER AT CLARIDON, OHIO (LAT 40 34 58 LONG 082 59 20)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
NOV. 02...	23	270	0	120	31	.4	3.7	1.4	442	320	692	7.6
DEC. 21...	102	--	--	--	--	--	--	--	--	--	617	--
APR. 12...	36	--	--	120	26	--	5.4	--	--	300	646	7.9
JUNE 07...	90	--	--	--	--	--	--	--	--	--	640	--
AUG. 03...	6.5	--	--	92	32	--	4.6	--	--	260	595	7.3
SEP. 30...	4.9	240	0	88	37	.4	5.8	1.1	416	270	659	7.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
SCIOTO RIVER BASIN--Continued												
03224500 - WHETSTONE CREEK NEAR ASHLEY, OHIO (LAT 40 27 18 LONG 082 57 28)												
NOV. 03...	36	--	--	--	--	--	--	--	--	--	1180	--
MAR. 04...	98	--	--	63	57	--	10	--	--	250	597	7.7
APR. 12...	26	--	--	85	85	--	2.4	--	--	300	744	8.4
JUNE 11...	13	--	--	--	--	--	--	--	--	--	871	--
AUG. 03...	6.2	--	--	70	110	--	2.5	--	--	290	804	7.5
SEP. 30...	3.0	246	0	79	240	.3	4.1	.75	728	360	1260	7.6
03225500 - OLENTANGY RIVER NEAR DELAWARE, OHIO (LAT 40 21 18 LONG 083 04 02)												
OCT. 22...	13	--	--	--	--	--	--	--	--	--	538	--
DEC. 15...	229	166	0	91	41	.3	13	.70	396	260	594	7.6
FEB. 16...	196	--	--	60	40	--	14	--	--	180	468	7.2
MAR. 31...	237	--	--	--	--	--	--	--	--	--	550	--
JUNE 02...	48	--	--	74	28	--	17	--	--	230	508	8.3
JULY 15...	73	--	--	81	33	--	8.2	--	--	250	541	7.4
SEP. 14...	22	163	0	71	35	.3	3.3	.28	310	220	508	7.6
03226800 - OLENTANGY RIVER NEAR WORTHINGTON, OHIO (LAT 40 06 37 LONG 083 01 55)												
OCT. 22...	22	228	0	130	48	.5	5.9	2.1	470	320	735	7.8
DEC. 07...	208	--	--	--	--	--	--	--	--	--	658	--
FEB. 18...	405	--	--	48	40	--	19	--	--	130	390	6.7
APR. 06...	45	--	--	140	58	--	12	--	--	340	786	8.2
JUNE 07...	85	--	--	--	--	--	--	--	--	--	698	--
JULY 20...	43	--	--	88	56	--	4.9	--	--	290	692	7.7
SEP. 17...	26	--	--	--	--	--	--	--	--	--	772	--
03227500 - SCIOTO RIVER AT COLUMBUS,OHIO (LAT 39 54 34 LONG 083 00 33)												
DEC. 01...	195	148	0	160	62	--	36	9.3	520	240	780	8.0
APR. 26...	205	--	--	160	53	--	36	--	--	280	761	6.8
MAY 03...	351	--	--	--	--	--	--	--	--	--	758	--
JUNE 01...	472	--	--	--	--	--	--	--	--	--	713	--
JULY 01...	499	--	--	120	33	--	41	--	--	270	643	7.3
AUG. 02...	230	--	--	--	--	--	--	--	--	--	688	--
SEP. 01...	160	--	--	--	--	--	--	--	--	--	338	--
03228500 - BIG WALNUT CREEK AT CENTRAL COLLEGE,OHIO (LAT 40 06 13 LONG 082 53 03)												
DEC. 09...	129	132	0	61	18	.3	3.3	.00	266	170	379	7.8
FEB. 05...	182	--	--	63	21	--	7.4	--	--	200	445	7.8
APR. 07...	102	--	--	64	20	--	8.7	--	--	150	358	7.5
JUNE 04...	113	--	--	--	--	--	--	--	--	--	378	--
JULY 12...	115	--	--	58	20	--	7.7	--	--	170	375	8.0
SEP. 01...	113	--	--	--	--	--	--	--	--	--	389	--
03228700 - BLACKLICK CREEK NEAR GROVEPORT,OHIO (LAT 39 53 25 LONG 082 51 50)												
AUG. 20...	10	320	0	130	87	.6	9.7	6.0	662	390	977	7.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
SCIOTO RIVER BASIN--Continued												
03228805 - ALUM CREEK AT AFRICA, OHIO (LAT 40 10 56 LONG 082 57 42)												
OCT. 23...	4.8	--	--	--	--	--	--	--	--	--	2030	--
DEC. 21...	29	--	--	--	--	--	--	--	--	--	1200	--
FEB. 12...	36	--	--	--	--	--	--	--	--	--	974	--
23...	1590	--	--	45	21	--	21	--	--	110	288	6.9
APR. 01...	37	--	--	180	100	--	4.1	--	--	320	816	7.8
20...	19	--	--	--	--	--	--	--	--	--	1010	--
MAY 11...	100	--	--	--	--	--	--	--	--	--	634	--
JUNE 09...	23	--	--	--	--	--	--	--	--	--	816	--
JULY 21...	.53	--	--	150	57	--	.6	--	--	390	780	8.0
AUG. 31...	2.4	--	--	--	--	--	--	--	--	--	805	--
03229000 - ALUM CREEK AT COLUMBUS, OHIO (LAT 39 56 42 LONG 082 56 28)												
OCT. 23...	16	229	0	140	67	.3	6.6	1.2	536	330	810	7.3
DEC. 28...	64	--	--	--	--	--	--	--	--	--	809	--
JAN. 23...	31	--	--	45	23	--	16	--	--	110	305	7.5
APR. 06...	55	--	--	180	94	--	2.2	--	--	360	851	8.4
12...	35	--	--	--	--	--	--	--	--	--	997	--
JUNE 04...	40	--	--	--	--	--	--	--	--	--	919	--
JULY 19...	11	--	--	94	37	--	3.4	--	--	270	618	7.4
AUG. 20...	34	--	--	--	--	--	--	--	--	--	467	--
SEP. 28...	27	146	0	83	42	.2	7.4	1.6	336	210	530	7.1
03229500 - BIG WALNUT CREEK AT REES, OHIO (LAT 39 51 24 LONG 082 57 26)												
OCT. 28...	49	258	0	100	48	.3	3.7	.72	454	320	717	7.9
FEB. 03...	66	--	--	--	--	--	--	--	--	--	1230	--
23...	4510	--	--	46	22	--	12	--	--	130	331	7.4
APR. 01...	185	--	--	140	55	--	4.3	--	--	330	730	7.8
JUNE 07...	65	--	--	--	--	--	--	--	--	--	835	--
JULY 20...	44	--	--	67	33	--	4.5	--	--	250	542	7.8
SEP. 23...	89	192	0	31	41	.3	7.1	1.4	358	240	570	8.2
03229800 - WALNUT CREEK NEAR ASHVILLE, OHIO (LAT 39 40 56 LONG 082 58 30)												
NOV. 03...	35	336	0	83	22	.4	2.0	1.0	420	350	710	7.9
AUG. 20...	32	341	0	75	23	.5	3.1	1.0	436	340	711	7.5
03230200 - BIG DARBY CREEK AT PLAIN CITY, OHIO (LAT 40 06 25 LONG 083 15 20)												
NOV. 03...	3.5	291	0	153	25	.6	4.6	.15	458	360	754	7.7
AUG. 19...	1.7	284	0	160	28	.7	2.5	.15	530	370	798	7.6
03230300 - LITTLE DARBY CREEK AT CHUCKERY, OHIO (LAT 40 06 42 LONG 083 23 30)												
AUG. 19...	3.4	354	0	67	15	.4	1.8	.24	398	350	660	7.9

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

SCIOTO RIVER BASIN--Continued

03230500 - BIG DARBY CREEK AT DARRYVILLE, OHIO (LAT 39 42 03 LONG 083 06 35)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 30...	36	341	0	94	46	.7	2.9	.48	514	380	828	7.7
DEC. 22...	491	--	--	--	--	--	--	--	--	--	607	--
FEB. 03...	59	--	--	120	41	--	8.3	--	--	440	864	7.6
APR. 05...	226	--	--	100	29	--	12	--	--	290	597	8.2
JUNE 07...	90	--	--	--	--	--	--	--	--	--	692	--
JULY 19...	65	--	--	70	30	--	5.6	--	--	310	621	8.2
AUG. 20...	26	302	0	83	42	.6	2.1	.29	436	330	709	7.6
SEP. 21...	182	--	--	--	--	--	--	--	--	--	793	--

03230600 - HOMINY CREEK AT CIRCLEVILLE, OHIO (LAT 39 35 26 LONG 082 55 25)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 19...	.29	316	0	96	17	.3	7.3	.03	444	360	665	7.9

03230800 - DEER CREEK AT MOUNT STERLING, OHIO (LAT 39 42 54 LONG 083 15 26)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 29...	16	321	0	76	27	.7	7.0	.91	458	360	706	7.8
DEC. 08...	24	--	--	--	--	--	--	--	--	--	676	--
JAN. 28...	38	--	--	77	24	--	9.3	--	--	370	690	7.7
MAR. 29...	168	--	--	--	--	--	--	--	--	--	542	--
MAY 28...	65	--	--	63	23	--	15	--	--	320	597	8.6
JULY 12...	98	--	--	55	20	--	11	--	--	360	593	8.0
SEP. 22...	86	282	0	54	18	.5	7.6	.65	366	300	566	7.7

03230900 - DEER CREEK NEAR PANCOASTBURG, OHIO (LAT 39 37 14 LONG 083 12 47)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
DEC. 09...	44	260	0	55	17	.5	3.4	.02	350	290	544	8.2
JAN. 29...	62	--	--	63	20	--	14	--	--	330	617	7.6
MAR. 29...	140	--	--	--	--	--	--	--	--	--	570	--
MAY 28...	10	--	--	60	20	--	19	--	--	270	538	8.0
JULY 13...	95	--	--	50	16	--	13	--	--	230	450	8.4
SEP. 22...	725	216	0	50	16	.4	6.7	.24	270	250	469	7.6

03231000 - DEER CREEK AT WILLIAMSPORT, OHIO (LAT 39 35 09 LONG 083 07 22)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 27...	16	--	--	--	--	--	--	--	--	--	511	--
DEC. 09...	54	--	--	--	--	--	--	--	--	--	583	--
FEB. 02...	76	--	--	70	21	--	13	--	--	240	497	7.8
MAR. 30...	184	--	--	--	--	--	--	--	--	--	566	--
JUNE 01...	44	--	--	92	20	--	12	--	--	300	580	7.8
JULY 13...	123	--	--	52	17	--	13	--	--	260	494	7.9
AUG. 17...	16	250	0	65	18	.4	6.8	.24	324	290	535	8.2

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

SCIOTO RIVER BASIN--Continued

03232000 - PAINT CREEK NEAR GREENFIELD, OHIO (LAT 39 22 45 LONG 083 22 32)

DATE	DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
NOV. 02...	38	--	--	--	--	--	--	--	--	--	747	--
DEC. 10...	9.7	322	12	93	50	.8	4.6	2.8	510	380	798	8.4
FEB. 25...	944	--	--	39	30	--	33	--	--	230	489	7.6
MAR. 30...	137	--	--	--	--	--	--	--	--	--	638	--
JUNE 01...	59	--	--	77	34	--	16	--	--	340	693	8.2
JULY 14...	66	--	--	78	23	--	13	--	--	350	649	8.6
AUG. 19...	7.8	284	17	64	59	.5	2.7	3.2	438	330	736	8.5
SEP. 22...	21	--	--	--	--	--	--	--	--	--	738	--

03232400 - RATTLESNAKE CREEK NEAR NEW PETERSBURG, OHIO (LAT 39 16 30 LONG 083 25 03)

DATE	DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
AUG. 19...	6.4	238	0	46	17	.5	2.6	.05	266	240	476	8.1

03232470 - PAINT CREEK BELOW PAINT CREEK DAM NEAR BAINBRIDGE, OHIO (LAT 39 15 08 LONG 083 20 58)

DATE	DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
NOV. 09...	67	--	--	--	--	--	--	--	--	--	670	--
DEC. 11...	48	--	--	--	--	--	--	--	--	--	677	--
FEB. 12...	312	--	--	55	27	--	16	--	--	310	621	8.2
APR. 05...	237	--	--	57	24	--	16	--	--	310	613	8.3
JUNE 02...	145	--	--	--	--	--	--	--	--	--	652	--
JULY 23...	59	--	--	57	30	--	5.7	--	--	300	592	8.4
SEP. 23...	114	338	0	51	24	.3	4.4	.72	382	330	634	8.0

03232500 - ROCKY FORK NEAR BARRETTS MILLS, OHIO (LAT 39 13 06 LONG 083 23 08)

DATE	DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
NOV. 02...	330	--	--	--	--	--	--	--	--	--	311	--
DEC. 10...	14	--	--	--	--	--	--	--	--	--	380	--
FEB. 16...	292	--	--	27	12	--	6.2	--	--	200	402	7.8
APR. 06...	15	--	--	32	7.7	--	3.9	--	--	240	460	7.9
JUNE 02...	36	--	--	--	--	--	--	--	--	--	370	--
JULY 22...	29	--	--	27	9.5	--	2.4	--	--	170	326	8.3
SEP. 23...	66	177	0	19	9.5	.2	3.1	.14	186	160	327	7.6

03234000 - PAINT CREEK NR. BOURNEVILLE, OHIO (LAT 39 15 49 LONG 083 10 01)

DATE	DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
NOV. 03...	582	--	--	--	--	--	--	--	--	--	429	--
DEC. 14...	284	--	--	--	--	--	--	--	--	--	618	--
FEB. 10...	880	--	--	37	17	--	12	--	--	230	467	7.6
25...	6110	--	--	--	--	--	--	--	--	--	322	--
APR. 05...	304	--	--	54	19	--	14	--	--	300	595	8.0
JUNE 02...	211	--	--	--	--	--	--	--	--	--	567	--
JULY 23...	128	--	--	47	17	--	5.5	--	--	280	524	8.0
SEP. 23...	168	255	0	34	15	.2	2.7	.41	276	250	484	8.2

03235500 - TAR HOLLOW CREEK AT TAR HOLLOW STATE PARK, O (LAT 39 23 22 LONG 082 45 03)

DATE	DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT. 13...	.02	67	0	25	3.4	.5	1.0	.05	126	70	173	7.1
NOV. 16...	1.0	--	--	--	--	--	--	--	--	--	119	--
JAN. 04...	6.2	--	--	24	3.5	--	1.9	--	--	30	92	6.5
MAR. 08...	3.6	--	--	--	--	--	--	--	--	--	96	--
JUNE 28...	.20	--	--	28	2.3	--	1.3	--	--	52	138	7.0
AUG. 18...	.01	64	0	28	2.3	.1	1.0	.03	102	71	179	6.9

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

SCIOTO RIVER BASIN--Continued

03235995 - SALT CREEK ABOVE DAMSITE NR LONDONDERRY OHIO (LAT 39 17 28 LONG 082 44 45)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 05...	41	148	0	35	12	.6	1.1	.01	178	152	336	8.0
AUG. 17...	26	171	0	30	13	.2	1.4	.05	218	170	312	7.5

03237050 - SUNFISH CREEK NEAR PIKETON, OHIO (LAT 39 00 42 LONG 083 03 43)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 23...	15	75	0	37	120	.1	2.5	.02	336	160	580	6.6

03237200 - SCIOTO BRUSH CREEK AT RUSHTOWN, OHIO (LAT 38 50 13 LONG 083 01 16)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
SEP. 02...	47	50	0	36	4.5	.1	3.8	.03	118	73	182	7.0

OHIO BRUSH CREEK BASIN

03237500 - OHIO BRUSH CREEK NEAR WEST UNION, OHIO (LAT 38 48 13 LONG 083 25 16)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 23...	75	--	--	--	--	--	--	--	--	--	416	--
DEC. 17...	1590	--	--	--	--	--	--	--	--	--	419	--
JAN. 22...	174	--	--	--	--	--	--	--	--	--	499	--
FEB. 05...	4500	--	--	19	6.7	--	2.0	--	--	93	206	7.1
24...	926	--	--	--	--	--	--	--	--	--	350	--
APR. 09...	122	--	--	45	9.2	--	1.2	--	--	240	469	8.1
JUNE 04...	52	--	--	--	--	--	--	--	--	--	456	--
JULY 16...	37	--	--	30	5.9	--	4.8	--	--	170	330	7.5
AUG. 23...	84	135	0	22	7.0	.1	2.1	.47	150	140	265	7.4
SEP. 24...	85	--	--	--	--	--	--	--	--	--	510	--

EAGLE CREEK BASIN

03238200 - EAGLE CREEK NEAR RIPLEY,OHIO (LAT 38 43 35 LONG 083 47 15)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
AUG. 23...	87	186	0	39	11	.2	1.4	.14	226	180	381	8.1

WHITEOAK CREEK BASIN

03238500 - WHITEOAK CREEK NEAR GEORGETOWN, OHIO (LAT 38 50 42 LONG 083 55 16)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 28...	23	186	0	53	22	.4	1.3	.53	260	210	460	8.1
DEC. 22...	3380	--	--	--	--	--	--	--	--	--	318	--
FEB. 19...	5110	--	--	24	9.3	--	8.1	--	--	96	230	7.1
APR. 08...	68	--	--	62	15	--	2.3	--	--	230	466	8.4
JUNE 10...	57	--	--	--	--	--	--	--	--	--	299	--
JULY 30...	101	--	--	26	9.4	--	2.9	--	--	150	307	7.7
SEP. 17...	66	209	0	32	12	.2	3.4	.46	256	210	404	8.0

LITTLE MIAMI RIVER BASIN

03240000 - LITTLE MIAMI RIVER NEAR OLDTOWN, OHIO (LAT 39 44 54 LONG 083 55 53)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 15...	19	--	--	--	--	--	--	--	--	--	670	--
DEC. 14...	30	--	--	--	--	--	--	--	--	--	659	--
FEB. 11...	54	--	--	77	25	--	10	--	--	360	620	8.1
APR. 02...	89	--	--	79	25	--	10	--	--	340	665	8.1
JUNE 01...	37	--	--	--	--	--	--	--	--	--	688	--
JULY 19...	36	--	--	69	25	--	6.6	--	--	340	644	8.3
SEP. 17...	14	336	0	68	31	.3	6.0	.89	436	360	693	8.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
LITTLE MIAMI RIVER BASIN--Continued												
03241500 - MASSIES CREEK AT WILBERFORCE, OHIO (LAT 39 43 21 LONG 083 52 56)												
OCT. 19...	4.4	--	--	--	--	--	--	--	--	--	764	--
DEC. 23...	50	--	--	--	--	--	--	--	--	--	723	--
FEB. 22...	906	--	--	20	12	--	22	--	--	100	243	8.0
APR. 01...	30	--	--	68	72	--	21	--	--	300	729	8.0
MAY 01...	16	--	--	--	--	--	--	--	--	--	685	--
JULY 27...	24	--	--	64	27	--	12	--	--	350	654	8.4
SEP. 17...	6.4	343	0	56	40	.3	7.4	1.4	450	370	739	7.7
03242150 - CAESAR CREEK NEAR XENIA, OHIO (LAT 39 37 25 LONG 083 54 09)												
OCT. 20...	1.9	207	6	44	24	.3	2.6	.14	276	220	481	8.4
FEB. 24...	208	--	--	43	20	--	25	--	--	230	461	7.4
MAR. 31...	22	--	--	--	--	--	--	--	--	--	615	--
JUNE 01...	12	--	--	59	25	--	9.8	--	--	320	609	8.0
JULY 27...	15	--	--	37	20	--	6.6	--	--	240	476	7.6
SEP. 16...	2.4	294	0	38	23	.3	4.0	.52	344	290	565	7.8
03242200 - ANDERSON FORK NR NEW BURLINGTON, OHIO (LAT 39 33 59 LONG 083 54 10)												
OCT. 20...	1.4	315	0	65	29	.3	1.5	.03	402	330	667	7.8
FEB. 24...	299	--	--	43	21	--	38	--	--	220	452	7.6
MAR. 31...	31	--	--	--	--	--	--	--	--	--	584	--
JULY 27...	21	--	--	49	25	--	21	--	--	290	561	8.3
SEP. 16...	9.0	322	0	67	29	.3	10	.28	422	360	672	8.0
03242350 - CAESAR CREEK NEAR WELLMAN, OHIO (LAT 39 28 57 LONG 084 03 52)												
OCT. 21...	10	--	--	--	--	--	--	--	--	--	544	--
MAY 25...	110	--	--	60	21	--	13	--	--	280	550	7.9
JULY 26...	68	--	--	34	18	--	5.7	--	--	210	423	8.0
SEP. 16...	21	272	0	47	24	.3	7.3	.46	348	280	560	7.8
03244000 - TODD FORK NEAR ROACHESTER, OHIO (LAT 39 20 07 LONG 084 05 12)												
OCT. 26...	13	268	0	58	32	.2	3.3	2.2	336	280	563	7.9
DEC. 29...	130	--	--	--	--	--	--	--	--	--	522	--
JAN. 20...	60	--	--	53	33	--	25	--	--	330	657	8.1
MAR. 31...	62	--	--	--	--	--	--	--	--	--	607	--
JUNE 03...	27	--	--	54	30	--	8.2	--	--	300	610	8.4
JULY 19...	9.6	--	--	42	25	--	5.3	--	--	250	511	7.9
SEP. 24...	43	205	0	37	23	.2	6.6	.89	268	220	459	7.5
03245500 - LITTLE MIAMI RIVER AT MILFORD, OHIO (LAT 39 10 17 LONG 084 17 53)												
OCT. 28...	144	326	0	62	53	.3	8.4	2.8	464	350	768	8.1
DEC. 21...	655	--	--	--	--	--	--	--	--	--	637	--
FEB. 24...	4910	--	--	45	18	--	21	--	--	170	375	7.3
APR. 02...	972	--	--	60	46	--	11	--	--	310	675	8.0
JUNE 03...	292	--	--	--	--	--	--	--	--	--	717	--
JULY 20...	192	--	--	58	43	--	9.2	--	--	340	693	8.1
SEP. 14...	388	210	0	43	30	.2	7.5	2.4	304	220	498	7.6

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

LITTLE MIAMI RIVER BASIN--Continued

03246200 - E FORK LITTLE MIAMI RIVER NR. MARATHON, OHIO (LAT 39 06 52 LONG 084 01 29)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 29...	14	--	--	--	--	--	--	--	--	--	526	--
DEC. 22...	2530	--	--	--	--	--	--	--	--	--	264	--
JAN. 21...	56	--	--	56	19	--	13	--	--	250	494	7.9
MAR. 31...	50	--	--	--	--	--	--	--	--	--	540	--
JUNE 08...	211	--	--	33	11	--	9.9	--	--	120	277	7.4
JULY 29...	140	--	--	25	11	--	6.8	--	--	120	266	7.3
SEP. 16...	75	186	0	36	15	.2	7.2	.76	268	210	406	7.4

03247050 - EAST FORK LITTLE MIAMI RIVER NR BATAVIA, OHIO (LAT 39 03 36 LONG 084 10 32)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
DEC. 22...	4510	--	--	--	--	--	--	--	--	--	243	--
FEB. 23...	8980	--	--	18	5.3	--	8.8	--	--	70	165	7.0
APR. 01...	83	--	--	57	19	--	7.0	--	--	250	501	8.4
JUNE 10...	102	--	--	--	--	--	--	--	--	--	278	--
JULY 21...	73	--	--	33	12	--	4.1	--	--	160	334	8.1
SEP. 15...	209	122	0	28	10	.1	5.0	.86	186	140	275	7.2

03247400 - SHAYLER RUN NEAR PERINTOWN, OHIO (LAT 39 06 46 LONG 084 13 24)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
NOV. 06...	2.3	--	--	--	--	--	--	--	--	--	731	--
DEC. 22...	85	--	--	--	--	--	--	--	--	--	305	--
FEB. 22...	190	--	--	33	15	--	6.8	--	--	89	239	8.1
APR. 07...	5.4	--	--	95	43	--	9.7	--	--	270	658	7.7
MAY 27...	3.7	--	--	--	--	--	--	--	--	--	634	--
JULY 19...	2.0	--	--	110	58	--	29	--	--	260	737	7.7
SEP. 15...	5.9	234	0	71	32	.2	7.5	4.7	340	250	578	8.2

03247500 - EAST FORK LITTLE MIAMI RIVER AT PERINTOWN, OHIO (LAT 39 08 13 LONG 084 14 17)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 29...	38	--	--	--	--	--	--	--	--	--	465	--
FEB. 22...	22400	--	--	22	9.9	--	8.8	--	--	110	254	7.2
APR. 01...	132	--	--	58	22	--	7.5	--	--	260	521	8.5
JULY 20...	19	--	--	36	15	--	7.5	--	--	170	362	8.2
SEP. 14...	569	112	0	23	9.5	.2	6.8	1.2	156	120	255	7.2

03248000 - LITTLE MIAMI RIVER AT PLAINVILLE, OHIO (LAT 39 08 13 LONG 084 21 11)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 29...	199	--	--	--	--	--	--	--	--	--	704	--
DEC. 21...	917	--	--	--	--	--	--	--	--	--	573	--
FEB. 23...	19000	--	--	56	34	--	10	--	--	190	463	7.7
APR. 07...	669	--	--	67	38	--	7.7	--	--	300	646	8.2
JUNE 07...	--	--	--	--	--	--	--	--	--	--	690	--
JULY 21...	273	--	--	58	38	--	7.7	--	--	320	647	8.3
SEP. 15...	719	170	0	34	21	.2	6.0	1.5	264	190	397	7.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
MILL CREEK BASIN												
03255500 - MILL CREEK AT READING, OHIO (LAT 39 13 14 LONG 084 26 49)												
NOV. 03...	32	--	--	--	--	--	--	--	--	--	640	--
DEC. 21...	118	--	--	--	--	--	--	--	--	--	688	--
MAR. 30...	32	--	--	82	58	--	9.3	--	--	330	746	8.1
MAY 24...	16	--	--	100	59	--	7.2	--	--	330	791	7.8
JULY 20...	12	--	--	100	53	--	4.4	--	--	290	666	8.3
SEP. 15...	26	270	0	110	66	.4	12	6.7	522	330	817	7.2
03257500 - WEST FORK MILL CREEK AT WOODLAWN, OHIO (LAT 39 15 14 LONG 084 28 13)												
NOV. 02...	17	222	0	51	35	.4	10	7.5	270	160	482	7.1
DEC. 21...	29	--	--	--	--	--	--	--	--	--	511	--
MAR. 24...	11	--	--	39	130	--	46	--	--	250	923	7.4
JULY 20...	1.6	--	--	52	40	--	20	--	--	160	496	7.1
SEP. 15...	15	110	0	41	26	.2	28	5.0	256	160	384	8.1
03259000 - MILL CREEK AT CARTHAGE, OHIO (LAT 39 12 07 LONG 084 28 16)												
NOV. 03...	58	172	0	67	40	.4	7.0	2.8	306	210	534	7.7
DEC. 21...	158	--	--	--	--	--	--	--	--	--	649	--
MAR. 30...	44	--	--	82	68	--	11	--	--	310	759	7.7
MAY 24...	15	--	--	99	62	--	7.4	--	--	330	791	7.6
JULY 21...	8.6	--	--	110	50	--	3.5	--	--	300	694	8.4
SEP. 15...	39	232	0	92	62	.4	14	4.0	448	290	715	7.3
GREAT MIAMI RIVER BASIN												
03260700 - BOKENGEHALAS CREEK NEAR DE GRAFF, OHIO (LAT 40 20 50 LONG 083 53 20)												
AUG. 09...	6.2	375	0	90	110	1.0	6.6	2.2	582	420	1040	8.2
03260800 - STONY CREEK NEAR DE GRAFF, OHIO (LAT 40 17 27 LONG 083 54 36)												
AUG. 09...	12	286	0	61	6.5	.3	2.2	.00	322	330	530	7.9
03261950 - LORAMIE CREEK NEAR NEWPORT,OHIO (LAT 40 18 25 LONG 084 23 02)												
AUG. 04...	1.5	212	0	140	66	.5	5.2	2.0	494	310	792	7.2
03262000 - LORAMIE CREEK AT LOCKINGTON,OHIO (LAT 40 12 35 LONG 084 14 32)												
AUG. 17...	6.0	344	0	83	10	.4	3.5	.47	434	360	691	7.7
03262500 - GREAT MIAMI RIVER AT PIQUA, OHIO (LAT 40 09 03 LONG 084 13 44)												
AUG. 17...	56	294	0	84	30	.7	10	3.1	430	330	688	7.7
03262700 - GREAT MIAMI RIVER AT TROY, OHIO (LAT 40 02 25 LONG 084 11 52)												
AUG. 10...	92	280	0	86	37	.5	6.3	4.1	424	310	684	7.8
03262800 - LOST CREEK NEAR TROY, OHIO (LAT 40 01 05 LONG 084 09 28)												
AUG. 16...	3.4	320	0	61	22	.2	8.0	.02	386	340	639	7.9
03263200 - STILLWATER RIVER AT WEBSTER, OHIO (LAT 40 11 20 LONG 084 28 42)												
AUG. 27...	5.0	331	0	120	23	.7	4.2	2.2	472	380	771	7.1

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
GREAT MIAMI RIVER BASIN—Continued												
03264000 - GREENVILLE CREEK NEAR BRADFORD,OHIO (LAT 40 06 08 LONG 084 25 48)												
AUG. 05...	24	315	0	71	22	.3	2.1	1.3	410	320	636	8.0
03265000 - STILLWATER RIVER AT PLEASANT HILL,OHIO (LAT 40 03 28 LONG 084 21 22)												
AUG. 12...	32	317	0	160	32	.4	2.3	1.5	406	330	686	8.0
03266500 - MAD RIVER AT ZANESFIELD, OHIO (LAT 40 21 01 LONG 083 40 28)												
OCT. 21...	2.0	--	--	--	--	--	--	--	--	--	646	--
DEC. 10...	1.6	--	--	--	--	--	--	--	--	--	494	--
FEB. 08...	2.9	--	--	30	11	--	7.0	--	--	210	420	7.3
APR. 14...	5.2	--	--	--	--	--	--	--	--	--	586	--
MAY 25...	8.6	--	--	44	9.8	--	2.1	--	--	260	486	8.4
JULY 14...	2.0	--	--	45	9.6	--	1.8	--	--	350	594	8.1
SEP. 01...	1.3	366	0	40	10	.2	1.7	.28	366	340	610	7.8
03267000 - MAD RIVER NEAR URBANA,OHIO (LAT 40 06 27 LONG 083 47 57)												
AUG. 10...	51	350	0	87	20	.2	4.2	.06	444	390	706	7.9
03267500 - MAD RIVER AT TREMONT CITY,OHIO (LAT 40 00 25 LONG 083 49 24)												
OCT. 14...	122	348	0	90	19	.3	7.8	.33	478	390	734	7.7
DEC. 10...	109	--	--	--	--	--	--	--	--	--	733	--
FEB. 03...	100	--	--	--	--	--	--	--	--	--	747	--
23...	992	--	--	42	9.1	--	15	--	--	200	395	8.2
APR. 05...	190	--	--	69	16	--	9.0	--	--	340	646	8.0
JUNE 02...	126	--	--	--	--	--	--	--	--	--	703	--
JULY 22...	114	--	--	82	19	--	6.2	--	--	370	674	8.2
SEP. 17...	97	355	0	54	16	.3	9.0	.40	442	390	694	8.0
03267700 - MOORE RUN NR. EAGLE CITY, OHIO (LAT 39 59 24 LONG 083 49 03)												
OCT. 13...	17	290	0	78	21	.2	7.9	.67	370	330	571	8.3
DEC. 11...	14	--	--	--	--	--	--	--	--	--	786	--
FEB. 22...	218	--	--	32	11	--	11	--	--	160	340	7.2
JUNE 03...	13	--	--	93	28	--	6.4	--	--	360	725	8.3
JULY 23...	15	--	--	99	24	--	6.5	--	--	430	791	7.9
SEP. 21...	15	384	0	99	27	.3	6.6	1.1	500	420	801	7.8
03267800 - MAD RIVER AT EAGLE CITY, OHIO (LAT 39 58 36 LONG 083 49 21)												
OCT. 13...	155	322	0	86	13	.3	8.1	.48	436	360	667	7.7
DEC. 14...	153	--	--	--	--	--	--	--	--	--	752	--
FEB. 22...	3990	--	--	19	5.7	--	5.9	--	--	140	288	7.5
APR. 05...	216	--	--	67	14	--	9.8	--	--	230	464	8.3
JUNE 02...	148	--	--	--	--	--	--	--	--	--	706	--
JULY 22...	121	--	--	83	16	--	7.5	--	--	270	512	8.2
SEP. 20...	214	178	0	34	18	.2	.8	8.2	226	180	394	7.2

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
GREAT MIAMI RIVER BASIN--Continued												
03267900 - MAD RIVEIR (ST.PARIS PIKE) AT EAGLE CITY,OHIO (LAT 39 57 51 LONG 083 49 54)												
OCT. 15...	132	337	0	92	15	.3	7.8	.49	458	380	705	7.8
DEC. 18...	142	--	--	--	--	--	--	--	--	--	753	--
FEB. 11...	172	--	--	--	--	--	--	--	--	--	765	--
23...	980	--	--	59	12	--	15	--	--	230	452	8.6
APR. 05...	232	--	--	87	15	--	9.1	--	--	350	666	8.0
JULY 22...	128	--	--	86	17	--	7.9	--	--	290	563	8.0
SEP. 20...	140	312	10	80	16	.3	7.3	.76	466	360	654	8.4
03269500 - MAD RIVER NEAR SPRINGFIELD,OHIO (LAT 39 55 23 LONG 083 52 13)												
SEP. 28...	227	321	7	86	26	.3	7.3	2.1	446	370	700	8.4
03270500 - GREAT MIAMI RIVER AT DAYTON,OHIO (LAT 39 45 55 LONG 084 11 51)												
AUG. 13...	482	306	0	71	46	.4	4.1	2.2	424	320	736	7.9
03270800 - WOLF CREEK AT TROTWOOD,OHIO (LAT 39 47 39 LONG 084 18 36)												
AUG. 24...	.51	326	0	76	72	.3	.7	.76	482	340	798	8.0
03271000 - WOLF CREEK AT DAYTON, OHIO (LAT 39 46 00 LONG 084 14 12)												
SEP. 08...	11	266	0	68	54	.3	3.2	.26	424	300	683	7.7
03271300 - HOLES CREEK NEAR KETTERING,OHIO (LAT 39 39 15 LONG 084 11 45)												
SEP. 15...	2.6	284	0	55	67	.2	5.4	.02	412	320	728	8.0
03271400 - BEAR CREEK AT ELLERTON, OHIO (LAT 39 40 23 LONG 084 18 38)												
AUG. 20...	1.8	340	0	76	34	.5	1.2	.20	406	340	721	8.1
03271620 - GREAT MIAMI RIVER AT FRANKLIN, OHIO (LAT 39 33 47 LONG 084 18 18)												
SEP. 15...	490	278	0	91	54	.4	10	3.8	446	320	742	7.3
03271700 - CLEAR CREEK AT FRANKLIN,OHIO (LAT 39 33 06 LONG 084 18 18)												
SEP. 13...	16	290	8	60	46	.3	3.6	.50	406	320	686	8.3
03271800 - TWIN CREEK NEAR INGOMAR, OHIO (LAT 39 42 28 LONG 084 31 30)												
AUG. 26...	8.0	316	0	54	24	.3	7.0	.46	372	320	613	7.9
03272200 - ELK CREEK AT MILTONVILLE, OHIO (LAT 39 30 04 LONG 084 27 39)												
AUG. 20...	1.2	210	0	58	18	.3	1.2	.02	256	230	477	7.7
03272300 - DICKS CREEK NEAR EXCELLO, OHIO (LAT 39 28 25 LONG 084 23 51)												
SEP. 13...	19	226	0	140	120	5.7	.8	1.5	590	310	1010	7.3
03272800 - SEVENMILE CREEK AT COLLINSVILLE,OHIO (LAT 39 31 23 LONG 084 34 39)												
AUG. 26...	7.1	266	8	50	22	.1	5.1	.02	322	290	533	8.0
03274200 - INDIAN CREEK NEAR MILLVILLE, OHIO (LAT 39 21 46 LONG 084 38 36)												
SEP. 01...	.79	284	0	52	22	.3	1.5	.06	324	290	579	7.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
STREAMS TRIBUTARY TO LAKE ERIE												
04177100 - EAST BRANCH ST JOSEPH RIVER NR PIONEER,OHIO (LAT 41 39 56 LONG 084 32 31)												
AUG. 24...	6.3	252	0	55	10	.4	3.8	.36	302	250	497	7.8
04180950 - ST MARYS RIVER AT MENDON,OHIO (LAT 40 40 35 LONG 084 31 07)												
AUG. 25...	19	204	0	130	43	.6	2.2	1.3	418	250	679	6.9
04185000 - TIFFIN RIVER AT STRYKER, OHIO (LAT 41 30 17 LONG 084 25 49)												
DEC. 02...	1420	184	0	76	23	.2	25	.28	330	260	543	7.3
MAR. 02...	1250	--	--	38	13	--	11	--	--	170	367	7.2
APR. 21...	167	--	--	80	24	--	5.6	--	--	310	602	8.3
JUNE 16...	256	--	--	--	--	--	--	--	--	--	593	--
JULY 07...	40	--	--	73	35	--	5.2	--	--	340	683	8.5
AUG. 19...	11	318	0	64	33	.5	2.5	.86	404	320	680	7.5
04185900 - AUGLAIZE RIVER NEAR BUCKLAND,OHIO (LAT 40 39 11 LONG 084 15 35)												
AUG. 24...	9.8	336	0	170	83	1.3	4.5	6.5	676	400	1030	7.6
04185950 - AUGLAIZE RIVER NEAR SPENCERVILLE, OHIO (LAT 40 44 36 LONG 084 18 57)												
DEC. 28...	34	--	--	--	--	--	--	--	--	--	841	--
MAY 10...	345	--	--	99	24	--	50	--	--	280	576	8.3
AUG. 05...	21	281	17	120	42	1.1	9.0	1.6	458	380	781	8.5
04188300 - BLANCHARD RIVER AT MT. BLANCHARD, OHIO (LAT 40 53 28 LONG 083 33 50)												
AUG. 25...	.48	170	0	220	43	.6	16	.17	540	350	800	7.9
04190400 - LITTLE AUGLAIZE RIVER NEAR MELROSE,OHIO (LAT 41 03 33 LONG 084 24 01)												
AUG. 24...	.18	130	0	220	50	.2	1.1	.03	532	330	792	7.7
04192500 - MAUMEE RIVER NEAR DEFIANCE, OHIO (LAT 41 17 31 LONG 084 16 52)												
DEC. 31...	1260	--	--	--	--	--	--	--	--	--	750	--
MAR. 03...	7200	--	--	42	17	--	19	--	--	140	376	7.8
APR. 21...	1480	--	--	110	36	--	12	--	--	320	714	7.6
AUG. 11...	289	--	--	120	53	--	6.7	--	--	240	753	7.6
19...	260	225	0	110	54	1.0	7.9	1.8	462	290	738	7.3
04192800 - BEAVER CREEK NEAR GRAND RAPIDS, OHIO (LAT 41 23 37 LONG 083 50 42)												
AUG. 24...	.63	190	0	430	140	.8	.9	.14	1150	650	1490	7.3
04194200 - TOUSSAINT CREEK NEAR LIMESTONE, OHIO (LAT 41 32 54 LONG 083 14 29)												
AUG. 25...	3.5	255	0	250	110	.5	6.0	.79	732	500	1120	7.3
04194300 - MIDDLE BRANCH PORTAGE RIVER AT MERMILL, OHIO (LAT 41 17 55 LONG 083 39 02)												
AUG. 24...	.03	156	0	190	130	.7	1.5	.21	672	380	994	7.8
04196400 - SOUTH BRANCH PORTAGE RIVER NR SIX POINTS,OHIO (LAT 41 10 41 LONG 083 30 36)												
AUG. 24...	6.5	139	0	120	61	.4	11	3.4	404	230	681	6.9

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
STREAMS TRIBUTARY TO LAKE ERIE--Continued												
04194500 - PORTAGE RIVER NEAR PEMBERVILLE,OHIO (LAT 41 22 44 LONG 083 28 34)												
AUG. 25...	6.7	174	0	160	110	.7	9.0	1.8	560	300	901	6.6
04196000 - SANDUSKY RIVER NEAR BUCYRUS, OHIO (LAT 40 48 13 LONG 083 00 21)												
NOV. 11...	13	--	--	--	--	--	--	--	--	--	791	--
JAN. 05...	458	--	--	60	22	--	24	--	--	170	388	8.1
MAR. 02...	133	--	--	--	--	--	--	--	--	--	552	--
APR. 14...	41	--	--	130	94	--	9.6	--	--	330	853	8.5
JUNE 09...	50	--	--	--	--	--	--	--	--	--	617	--
AUG. 03...	4.4	--	--	130	120	--	37	--	--	270	917	6.7
SEP. 27...	4.5	148	0	110	88	.4	47	13	514	230	793	7.8
04196200 - BROKEN SWORD CREEK AT NEVADA, OHIO (LAT 40 49 34 LONG 083 09 11)												
AUG. 26...	.43	242	0	150	19	.6	3.0	.17	464	350	692	8.0
04196600 - TYMOCHTEE CREEK NEAR MARSEILLES, OHIO (LAT 40 42 58 LONG 083 23 32)												
MAR. 01...	180	--	--	70	17	--	40	--	--	220	463	7.7
AUG. 03...	.79	226	0	210	28	.7	1.5	.14	562	400	798	7.5
04197100 - HONEY CREEK AT MELMORE, OHIO (LAT 41 01 20 LONG 083 06 35)												
AUG. 26...	2.4	216	0	80	19	.6	4.3	.15	348	260	527	7.4
04197300 - WOLF CREEK AT BETTSVILLE, OHIO (LAT 41 14 58 LONG 083 14 08)												
AUG. 25...	.74	182	0	120	40	.3	7.7	.63	404	280	647	7.2
04197400 - EAST BRANCH WOLF CREEK AT FORT SENECA,OHIO (LAT 41 12 40 LONG 083 10 50)												
AUG. 25...	1.1	158	0	83	25	.6	12	.21	302	210	479	7.3
04198010 - GREEN CREEK NEAR FREMONT,OHIO (LAT 41 23 36 LONG 083 01 35)												
AUG. 17...	15	244	0	1500	15	1.1	.4	.03	2400	1600	2390	7.4
04198015 - COLD CREEK NEAR CASTALIA, OHIO (LAT 41 25 12 LONG 082 48 02)												
AUG. 18...	20	240	0	950	20	.9	.9	.10	1720	1170	1860	7.5
04198020 - WEST BRANCH HURON RIVER NR MONROEVILLE, OHIO (LAT 41 16 46 LONG 082 40 32)												
AUG. 17...	8.0	220	0	220	29	.3	.8	.38	556	390	823	7.8
04199300 - VERMILION RIVER AT CLARKSFIELD, OHIO (LAT 41 11 44 LONG 082 24 53)												
AUG. 18...	.22	147	0	87	26	.3	.8	.04	296	190	479	7.4
04200050 - WEST BRANCH BLACK RIVER NEAR OBERLIN, OHIO (LAT 41 15 54 LONG 082 10 47)												
AUG. 18...	.36	247	0	160	47	.4	2.1	.76	526	350	817	7.2
04201400 - WEST BRANCH ROCKY RIVER AT WEST VIEW, OHIO (LAT 41 21 03 LONG 081 54 12)												
AUG. 18...	4.3	232	0	140	190	.5	4.0	2.5	726	290	1220	7.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

STREAMS TRIBUTARY TO LAKE ERIE--Continued

04201500 - ROCKY RIVER NEAR BEREA, OHIO (LAT 41 24 24 LONG 081 53 14)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 28...	43	--	--	--	--	--	--	--	--	--	853	--
DEC. 09...	147	--	--	--	--	--	--	--	--	--	648	--
JAN. 27...	90	--	--	160	160	--	14	--	--	330	1140	7.2
MAR. 23...	414	--	--	--	--	--	--	--	--	--	665	--
MAY 12...	149	--	--	110	86	--	9.1	--	--	220	685	7.0
JUNE 29...	67	--	--	--	--	--	--	--	--	--	592	--
AUG. 18...	10	--	--	160	100	--	47	--	--	260	869	7.9
SEP. 08...	12	126	0	130	74	.5	21	6.9	430	220	717	6.9

04202000 - CUYAHOGA RIVER AT HIRAM RAPIDS, OHIO (LAT 41 20 26 LONG 081 10 01)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 22...	175	84	0	34	18	.2	1.2	.50	184	110	272	6.8
DEC. 16...	570	--	--	--	--	--	--	--	--	--	225	--
FEB. 04...	76	--	--	39	22	--	3.8	--	--	130	325	7.7
APR. 05...	286	--	--	38	25	--	1.4	--	--	85	250	7.8
JUNE 01...	58	--	--	--	--	--	--	--	--	--	294	--
JULY 22...	69	--	--	35	19	--	1.5	--	--	120	292	8.0
SEP. 15...	111	98	0	38	26	.1	2.8	.33	198	120	313	7.2

04204000 - LITTLE CUYAHOGA RIVER AT MOGADORE, OHIO (LAT 41 03 47 LONG 081 23 38)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 28...	7.7	--	--	--	--	--	--	--	--	--	410	--
DEC. 28...	18	--	--	--	--	--	--	--	--	--	386	--
FEB. 24...	63	--	--	--	--	--	--	--	--	--	--	--
APR. 15...	9.4	--	--	60	35	--	3.7	--	--	170	434	7.3
JUNE 07...	9.4	--	--	--	--	--	--	--	--	--	400	--
JULY 29...	1.3	--	--	52	36	--	3.4	--	--	190	453	7.4
AUG. 09...	1.5	172	0	50	32	.2	6.2	.93	260	190	452	7.2
SEP. 16...	5.4	--	--	--	--	--	--	--	--	--	507	--

04204500 - LITTLE CUYAHOGA RIVER AT MASSILLON RD AKRON,O (LAT 41 03 37 LONG 081 27 48)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 27...	14	--	--	--	--	--	--	--	--	--	468	--
DEC. 28...	28	--	--	--	--	--	--	--	--	--	474	--
FEB. 24...	108	--	--	72	31	--	2.7	--	--	170	405	7.7
APR. 15...	22	--	--	71	36	--	3.1	--	--	200	479	7.7
JUNE 08...	20	--	--	--	--	--	--	--	--	--	466	--
JULY 28...	5.5	--	--	72	33	--	2.2	--	--	240	535	7.6
SEP. 17...	14	166	0	79	33	.2	2.8	.31	326	230	512	7.4

04205000 - SPRINGFIELD LAKE OUTLET AT AKRON, OHIO (LAT 41 03 21 LONG 081 27 52)

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT. 27...	.70	--	--	--	--	--	--	--	--	--	595	--
DEC. 28...	7.9	--	--	--	--	--	--	--	--	--	737	--
FEB. 22...	65	--	--	40	85	--	5.8	--	--	110	507	7.5
MAR. 01...	19	--	--	--	--	--	--	--	--	--	473	--
APR. 07...	6.2	--	--	67	60	--	2.6	--	--	190	542	7.8
JUNE 08...	1.1	--	--	--	--	--	--	--	--	--	540	--
JULY 01...	.62	--	--	56	59	--	2.1	--	--	220	563	7.8
28...	.29	--	--	--	--	--	--	--	--	--	600	--
AUG. 26...	.33	168	0	93	63	.2	1.2	.16	338	230	587	7.7
SEP. 16...	1.3	--	--	--	--	--	--	--	--	--	504	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
STREAMS TRIBUTARY TO LAKE ERIE--Continued												
04207200 - TINKERS CREEK AT BEDFORD, OHIO (LAT 41 23 04 LONG 081 31 39)												
NOV.												
16...	516	--	--	--	--	--	--	--	--	--	318	--
JAN.												
19...	65	--	--	69	180	--	18	--	--	240	964	7.7
MAR.												
29...	195	--	--	--	--	--	--	--	--	--	756	--
MAY												
12...	146	--	--	76	140	--	6.8	--	--	270	764	8.1
JULY												
07...	16	--	--	71	89	--	8.4	--	--	250	725	7.2
AUG.												
23...	40	96	0	64	220	1.2	8.0	1.9	568	349	969	6.8
SEP.												
13...	723	--	--	--	--	--	--	--	--	--	482	--
04207500 - OHIO CANAL AT INDEPENDENCE, OHIO (LAT 41 23 25 LONG 081 37 30)												
NOV.												
17...	78	--	--	--	--	--	--	--	--	--	606	--
JAN.												
20...	79	--	--	110	220	--	17	--	--	230	1120	8.3
MAR.												
17...	89	--	--	--	--	--	--	--	--	--	756	--
MAY												
13...	96	--	--	89	110	--	7.1	--	--	200	747	7.9
JULY												
06...	52	--	--	120	240	--	36	--	--	140	1700	8.4
AUG.												
26...	26	176	0	110	200	.5	8.4	3.4	684	240	1170	7.3
04209000 - CHAGRIN RIVER AT WILLOUGHBY, OHIO (LAT 41 37 51 LONG 081 24 13)												
JAN.												
12...	167	--	--	69	38	--	3.8	--	--	180	470	7.7
MAR.												
08...	471	--	--	--	--	--	--	--	--	--	504	--
MAY												
12...	242	--	--	73	43	--	1.3	--	--	170	468	8.3
JULY												
07...	57	--	--	59	43	--	2.0	--	--	200	518	7.6
AUG.												
23...	122	124	0	57	42	.3	5.5	.96	276	150	451	7.1
SEP.												
16...	696	--	--	--	--	--	--	--	--	--	798	--
04210100 - HOSKINS CREEK AT HARTSGROVE, OHIO (LAT 41 36 48 LONG 080 57 12)												
AUG.												
17...	.03	108	0	9.5	15	.3	1.1	.10	190	150	341	7.7
04211500 - MILL CREEK NEAR JEFFERSON, OHIO (LAT 41 45 11 LONG 080 48 13)												
OCT.												
21...	35	--	--	--	--	--	--	--	--	--	735	--
DEC.												
15...	189	--	--	--	--	--	--	--	--	--	569	--
FEB.												
23...	18	--	--	41	52	--	1.7	--	--	110	372	8.9
APR.												
06...	23	--	--	32	31	--	.8	--	--	76	219	7.0
JUNE												
10...	19	--	--	--	--	--	--	--	--	--	311	--
SEP.												
15...	2.8	68	0	38	46	.3	3.7	.19	210	110	556	7.5
04212000 - GRAND RIVER NEAR MADISON, OHIO (LAT 41 44 26 LONG 081 02 49)												
OCT.												
21...	863	99	0	66	21	.4	2.4	.10	187	110	388	7.6
DEC.												
15...	1080	--	--	--	--	--	--	--	--	--	395	--
APR.												
06...	271	--	--	53	26	--	1.8	--	--	96	274	8.1
JUNE												
08...	230	--	--	--	--	--	--	--	--	--	276	--
AUG.												
11...	3.7	--	--	55	32	--	.5	--	--	160	396	7.1
SEP.												
14...	27	88	0	71	26	.2	2.4	.14	236	140	396	7.3

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
STREAMS TRIBUTARY TO LAKE ERIE--Continued												
04212500 - ASHTABULA RIVER NEAR ASHTABULA, OHIO (LAT 41 51 20 LONG 080 45 44)												
DEC. 14...	368	--	--	--	--	--	--	--	--	--	173	--
FEB. 02...	34	--	--	42	31	--	2.4	--	--	99	300	7.2
APR. 07...	47	--	--	39	20	--	.5	--	--	78	252	7.2
AUG. 10...	.05	--	--	180	120	--	.4	--	--	270	853	7.5
SEP. 15...	18	62	0	110	51	.1	.7	.05	318	170	499	7.1
04213000 - CONNEAUT CREEK AT CONNEAUT, OHIO (LAT 41 55 37 LONG 080 36 15)												
OCT. 19...	203	65	0	32	13	.2	1.2	.00	162	90	224	7.2
DEC. 14...	680	--	--	--	--	--	--	--	--	--	172	--
FEB. 02...	96	--	--	41	20	--	3.7	--	--	110	274	7.6
APR. 07...	115	--	--	43	14	--	.7	--	--	92	222	7.6
JUNE 07...	210	--	--	--	--	--	--	--	--	--	280	--
AUG. 10...	6.8	--	--	66	52	--	.8	--	--	170	486	8.0
SEPT. 14...	26	108	0	82	30	.1	.8	.07	256	180	428	7.7

ATHENS COUNTY

391934N0820650.1 ATHENS OHIO MUNICIPAL WELL 2A (AT-10), DEPTH 52 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	pH	TEMPERATURE (DEG C)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	MANGANESE (MN) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	ALKALINITY AS BICARBONATE (HCO3) (MG/L)
OCT. 8, 1970..	1010	7.4	--	13	5000	810	130	38	31	2.9	362
MAY 20, 1971.A	972	7.2	--	--	--	--	--	--	32	--	365

AUGLAIZE COUNTY

403403N0841257.1 WAPAKONETA OHIO MUNICIPAL WELL 6 (AU-11), DEPTH 268 FT., WATER BEARING FORMATION DOLOMITE

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	pH	TEMPERATURE (DEG C)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	MANGANESE (MN) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	ALKALINITY AS BICARBONATE (HCO3) (MG/L)
OCT. 21 1970..	890	7.7	--	18	1800	30	120	43	27	2.2	382
MAY 20, 1971.A	920	7.8	13.0	--	--	--	--	--	28	--	394

BUTLER COUNTY

392445N0843330.1 HAMILTON OHIO, CHAMPION PAPER CO., WELL 4 (BU-36), DEPTH 168 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	pH	TEMPERATURE (DEG C)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	MANGANESE (MN) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	ALKALINITY AS BICARBONATE (HCO3) (MG/L)
NOV. 27 1970.A	808	7.3	16.5	--	60	0	--	--	--	--	338
FEB. 23 1971..	809	7.4	15.5	--	50	2	--	--	--	--	344
MAY 25....	816	7.3	16.5	--	76	15	--	--	--	--	348
AUG. 18...A	798	7.6	18.0	--	120	25	--	--	--	--	326

CLARK COUNTY

395833N0834919.1 SPRINGFIELD OHIO MUNICIPAL WELL 5 (CL-20), DEPTH 94 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	pH	TEMPERATURE (DEG C)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	MANGANESE (MN) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	ALKALINITY AS BICARBONATE (HCO3) (MG/L)
OCT. 21 1970..	738	7.5	--	11	760	160	110	34	6.3	1.7	372
MAY 26, 1971.A	727	8.0	12.0	--	--	--	--	--	7.4	--	378

HAMILTON COUNTY

391634N0841536.1 LOVELAND OHIO MUNICIPAL WELL 2 (H-22), DEPTH 70 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	pH	TEMPERATURE (DEG C)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	MANGANESE (MN) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	ALKALINITY AS BICARBONATE (HCO3) (MG/L)
OCT. 7, 1970..	643	7.5	--	14	30	70	100	21	10	1.4	332
MAY 27, 1971.A	674	7.5	14.5	--	--	--	--	--	12	--	352

390843N0844805.1 NORTH BEND OHIO, DUPONT CORP. WELL 30 (H-31), DEPTH 134 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	pH	TEMPERATURE (DEG C)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	MANGANESE (MN) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	ALKALINITY AS BICARBONATE (HCO3) (MG/L)
OCT. 30 1970..	1010	7.3	11.0	18	100	180	140	30	18	22	450
MAY 27, 1971.A	612	7.2	15.5	--	--	--	--	--	23	--	246

[illegible] ROSS OHIO, SW OHIO WATER CO., COLLECTOR NO. 1 (H-10), DEPTH 144 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	pH	TEMPERATURE (DEG C)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	MANGANESE (MN) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	ALKALINITY AS BICARBONATE (HCO3) (MG/L)
NOV. 24 1970.A	743	7.4	14.0	--	40	310	--	--	--	--	324
FEB. 10 1971..	700	7.8	10.0	--	50	360	--	--	--	--	292
MAY 14....	754	7.5	13.5	--	10	60	--	--	--	--	[illegible]
AUG. 12...A	740	7.7	15.0	--	40	70	--	--	--	--	[illegible]

JEFFERSON COUNTY

[illegible] MINGO JUNCTION OHIO MUNICIPAL WELL ([illegible]), DEPTH [illegible] FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	pH	TEMPERATURE (DEG C)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	MANGANESE (MN) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	ALKALINITY AS BICARBONATE (HCO3) (MG/L)
NOV. 4, 1970..	[illegible]	6.9	--	10	[illegible]	[illegible]	60	13	[illegible]	6.7	[illegible]
MAY 20, 1971.A	[illegible]	6.8	--	--	--	--	--	--	15	--	60

A Heavy metals determined on this date, see page [illegible].

ATHENS COUNTY

391934N0820650.1 ATHENS OHIO MUNICIPAL WELL 2A (AT-10), DEPTH 52 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	COLOR	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
OCT. 8, 1970..	150	76	.2	.0	--	643	480	184	5	--	--
May 20, 1971..	130	70	--	.3	.00	652	470	170	--	2	.04

AUGLAIZE COUNTY

403403N0841257.1 WAPAKONETA OHIO MUNICIPAL WELL 6 (AU-11), DEPTH 268 FT., WATER BEARING FORMATION DOLOMITE

DATE	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	COLOR	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
OCT. 21 1970..	170	16	1.3	3.2	--	611	480	160	3	--	--
MAY 20, 1971..	180	16	--	3.0	.00	633	460	140	--	2	.06

BUTLER COUNTY

392445N0843330.1 HAMILTON OHIO, CHAMPION PAPER CO., WELL 4 (BU-36), DEPTH 168 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	COLOR	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
NOV. 27 1970..	100	34	.2	6.1	--	487	386	108	--	--	--
FEB. 23 1971..	98	40	.3	4.9	--	503	380	98	--	--	--
MAY 25....	99	38	.3	7.2	--	529	340	54	--	--	--
AUG. 18....	87	37	.2	4.4	--	496	380	110	--	--	--

CLARK COUNTY

395833N0834919.1 SPRINGFIELD OHIO MUNICIPAL WELL 5 (CL-20), DEPTH 94 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	COLOR	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
OCT. 21 1970..	88	14	.2	6.1	--	469	410	110	0	--	--
MAY 26, 1971..	85	13	--	3.1	.34	458	390	82	--	2	.00

HAMILTON COUNTY

391634N0841536.1 LOVELAND OHIO MUNICIPAL WELL 2 (H-22), DEPTH 70 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	COLOR	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
OCT. 7, 1970..	42	20	.2	4.0	--	414	340	64	5	--	--
MAY 27, 1971..	52	20	--	5.3	.00	402	350	61	--	3	.00

390645N0844805.1 NORTH BEND OHIO, DUPONT CORP. WELL 38 (H-21), DEPTH 134 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	COLOR	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
OCT. 30 1970..	130	38	.2	3.3	--	627	510	140	5	--	--
MAY 27, 1971..	68	34	--	6.3	.00	371	270	68	--	2	.01

391748N0843838.1 ROSS OHIO, SW OHIO WATER CO., COLLECTOR NO. 1 (H-19), DEPTH 144 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	COLOR	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
NOV. 24 1970..	85	20	.2	6.5	--	439	338	72	--	--	--
FEB. 19 1971..	87	36	.3	5.7	--	432	320	80	--	--	--
MAY 14....	82	36	.3	9.3	--	470	320	38	--	--	--
AUG. 12....	77	33	.6	5.0	--	468	360	85	--	--	--

JEFFERSON COUNTY

[illegible] MINGO JUNCTION OHIO MUNICIPAL WELL (JE-10), DEPTH 74 FT., WATER BEARING FORMATION SAND AND GRAVEL

DATE	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	COLOR	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
NOV. 4, 1970..	180	65	.7	1.8	--	433	260	180	5	--	--
MAY 20, 1971..	170	26	--	6.7	.00	405	250	180	--	--	.00

CHEMICAL ANALYSES OF GROUND WATER IN OHIO, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	pH	TEMPERATURE (DEG C)	SILICA (SIO2) (MG/L)	IRON (FE) (UG/L)	MANGANESE (MN) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	ALKALINITY AS BICARBONATE (HCO3) (MG/L)
MEDINA COUNTY											
410040N0814249.1 WADSWORTH OHIO MUNICIPAL WELL 7 (MD-10), DEPTH 227 FT., WATER BEARING FORMATION SANDSTONE											
OCT. 13 1970..	186	6.7	--	11	5800	410	24	7.0	2.1	.8	90
JUNE 4, 1971.A	232	6.7	13.5	--	--	--	--	--	2.5	--	100
MIAMI COUNTY											
400215N0841136.1 TROY OHIO MUNICIPAL WELL NO. 2 (MI-15), DEPTH 55 FT., WATER BEARING FORMATION SAND AND GRAVEL											
NOV. 27 1970.A	682	7.7	14.5	--	1400	30	--	--	--	--	336
FEB. 23 1971..	689	7.4	13.0	--	1400	20	--	--	--	--	338
MAY 26....	676	7.5	12.5	--	1400	45	--	--	--	--	340
AUG. 18...A	681	7.7	14.0	--	1200	34	--	--	--	--	331
MONTGOMERY COUNTY											
393853N0841707.1 MIAMISBURG OHIO BOX BOARD CO., WELL 2 (MT-63), DEPTH 65 FT., WATER BEARING FORMATION SAND AND GRAVEL											
DEC. 23 1970.A	944	7.2	15.0	--	--	--	--	--	--	--	400
FEB. 18 1971..	939	8.2	14.5	--	330	260	--	--	--	--	336
MAY 25....	933	7.3	15.5	--	650	100	--	--	--	--	396
AUG. 18...A	1050	7.4	17.0	--	490	43	--	--	--	--	442
MUSKINGUM COUNTY											
395753N0815935.1 ZANESVILLE OHIO MUNICIPAL WELL 6 (MU-10), DEPTH 65 FT , WATER BEARING FORMATION SAND AND GRAVEL											
OCT. 8, 1970..	1030	7.9	--	15	540	770	120	22	59	4.3	214
MAY 19, 1971.A	1060	7.5	--	--	--	--	--	--	66	--	225
PICKAWAY COUNTY											
393325N0825711.1 CIRCLEVILLE OHIO PITTS. PLATE GLASS CO., WELL (PK-21), DEPTH 135 FT., WATER BEARING FORMATION SAND AND GRAVEL											
OCT. 7, 1970..	676	7.5	--	20	2700	80	100	31	6.6	1.0	390
MAY 25, 1971.A	673	7.8	--	--	--	--	--	--	8.4	--	406
RICHLAND COUNTY											
404100N0823505.1 LEXINGTON OHIO STEVENS MFG. CO., WELL (R-10), DEPTH 168 FT., WATER BEARING FORMATION SANDSTONE											
OCT. 13 1970..	500	7.4	--	15	270	130	51	16	36	1.5	258
JUNE 8, 1971.A	506	7.6	--	--	--	--	--	--	33	--	268
TUSCARAWAS COUNTY											
403210N0812931.1 DOVER OHIO MUNICIPAL WELL 7 (TU-10), DEPTH 103 FT., WATER BEARING FORMATION SAND AND GRAVEL											
OCT. 13 1970..	519	7.8	--	14	420	220	61	18	3.8	.9	202
JUNE 4, 1971.A	510	7.7	13.0	--	--	--	--	--	3.7	--	216
WILLIAMS COUNTY											
412853N0843220.1 BRYAN OHIO MUNICIPAL WELL 4 (WM-10), DEPTH 147 FT., WATER BEARING FORMATION SAND AND GRAVEL											
OCT. 21 1970..	656	7.3	--	20	610	10	62	27	27	1.9	352
MAY 20, 1971.A	650	7.9	12.0	--	--	--	--	--	29	--	360

A Heavy metals determined on this date, see page 380 and 381.

DATE	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	COLOR	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
MEDINA COUNTY											
410040N0814249.1 WADSWORTH OHIO MUNICIPAL WELL 7 (MD-10), DEPTH 227 FT., WATER BEARING FORMATION SANDSTONE											
OCT. 13 1970..	18	1.0	.1	.0	--	108	89	15	5	--	--
JUNE 4, 1971..	35	1.0	--	.0	.00	131	110	28	--	0	.03
MIAMI COUNTY											
400215N0841136.1 TROY OHIO MUNICIPAL WELL NO. 2 (MI-15), DEPTH 55 FT., WATER BEARING FORMATION SAND AND GRAVEL											
NOV. 27 1970..	64	21	.8	.0	--	403	350	74	--	--	--
FEB. 23 1971..	65	26	.7	.2	--	408	350	72	--	--	--
MAY 26....	66	18	.8	2.4	--	404	330	51	--	--	--
AUG. 18....	56	20	.9	1.5	--	408	340	68	--	--	--
MONTGOMERY COUNTY											
393853N0841707.1 MIAMISBURG OHIO BOX BOARD CO., WELL 2 (MT-63), DEPTH 65 FT., WATER BEARING FORMATION SAND AND GRAVEL											
DEC. 23 1970..	110	56	.4	4.7	--	610	437	108	--	--	--
FEB. 18 1971..	110	56	.4	4.0	--	577	370	94	--	--	--
MAY 25....	100	56	.4	4.2	--	595	400	75	--	--	--
AUG. 18....	110	66	.3	2.8	--	654	470	110	--	--	--
MUSKINGUM COUNTY											
395753N0815035.1 ZANESVILLE OHIO MUNICIPAL WELL 6 (MU-10), DEPTH 65 FT., WATER BEARING FORMATION SAND AND GRAVEL											
OCT. 8, 1970..	120	150	.5	.3	--	647	390	215	5	--	--
MAY 19, 1971..	140	150	--	1.3	.00	640	390	200	--	2	.04
PICKAWAY COUNTY											
393325N0825711.1 CIRCLEVILLE OHIO PITTS. PLATE GLASS CO., WELL (PK-21), DEPTH 135 FT., WATER BEARING FORMATION SAND AND GRAVEL											
OCT. 7, 1970..	55	11	.5	.1	--	413	380	58	5	--	--
MAY 25, 1971..	47	8.0	--	.0	.19	400	370	37	--	5	.00
RICHLAND COUNTY											
404100N0823505.1 LEXINGTON OHIO STEVENS MFG. CO., WELL (R-10), DEPTH 168 FT., WATER BEARING FORMATION SANDSTONE											
OCT. 13 1970..	29	18	.3	.1	--	290	190	0	0	--	--
JUNE 8, 1971..	32	14	--	.0	2.4	285	200	0	--	0	.00
TUSCARAWAS COUNTY											
403210N0812931.1 DOVER OHIO MUNICIPAL WELL 7 (TU-10), DEPTH 103 FT., WATER BEARING FORMATION SAND AND GRAVEL											
OCT. 13 1970..	100	5.0	.1	.6	--	337	280	110	3	--	--
JUNE 4, 1971..	93	3.0	--	.3	.00	330	270	92	--	0	.02
WILLIAMS COUNTY											
412853N0843220.1 BRYAN OHIO MUNICIPAL WELL 4 (WM-10), DEPTH 147 FT., WATER BEARING FORMATION SAND AND GRAVEL											
OCT. 21 1970..	32	28	2.0	2.3	--	380	310	18	0	--	--
MAY 20, 1971..	[illegible]	23	--	2.1	.00	365	300	4	--	--	.09

DETERMINATIONS OF HEAVY METALS

DATE	ARSENIC (AS) (UG/L)	CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	COPPER (CU) (UG/L)	LEAD (PB) (UG/L)	NICKEL (NI) (UG/L)	ZINC (ZN) (UG/L)
ATHENS COUNTY--Continued								
391934N0820650.1 ATHENS OHIO MUNICIPAL WELL 2A (AT-10), DEPTH 52 FT., WATER BEARING FORMATION SAND AND GRAVEL								
MAY 20, 1971..	0	0	--	0	--	0	4	--
AUGLAIZE COUNTY--Continued								
403403N0841257.1 WAPAKONETA OHIO MUNICIPAL WELL 6 (AU-11), DEPTH 268 FT., WATER BEARING FORMATION DOLOMITE								
MAY 20, 1971..	0	0	--	0	--	3	2	--
BUTLER COUNTY--Continued								
392445N0843330.1 HAMILTON OHIO, CHAMPION PAPER CO., WELL 4 (BU-36), DEPTH 168 FT., WATER BEARING FORMATION SAND AND GRAVEL								
NOV. 27 1970..	0	--	20	--	0	80	--	30
AUG. 18 1971..	0	--	0	--	8	5	--	20
CLARK COUNTY--Continued								
395833N0834919.1 SPRINGFIELD OHIO MUNICIPAL WELL 5 (CL-20), DEPTH 94 FT., WATER BEARING FORMATION SAND AND GRAVEL								
MAY 26, 1971..	0	0	--	0	--	0	16	--
HAMILTON COUNTY--Continued								
391634N0841526.1 LOVELAND OHIO MUNICIPAL WELL 2 (H-22), DEPTH 70 FT., WATER BEARING FORMATION SAND AND GRAVEL								
MAY 27, 1971..	0	0	--	0	--	0	8	--
390645N0844805.1 NORTH BEND OHIO, DUPONT CORP. WELL 38 (H-21), DEPTH 134 FT., WATER BEARING FORMATION SAND AND GRAVEL								
MAY 27, 1971..	0	0	--	0	--	0	4	--
391748N0843938.1 ROSS OHIO, SW OHIO WATER CO., COLLECTOR NO. 1 (H-19), DEPTH 144 FT., WATER BEARING FORMATION SAND AND GRAVEL								
NOV. 24 1970..	0	--	0	--	0	70	--	0
AUG. 12 1971..	0	--	0	--	1	2	--	40
JEFFERSON COUNTY--Continued								
401853N0803611.1 MINGO JUNCTION OHIO MUNICIPAL WELL (JE-10), DEPTH 74 FT., WATER BEARING FORMATION SAND AND GRAVEL								
MAY 26, 1971..	0	0	--	0	--	1	6	--
MEDINA COUNTY--Continued								
410040N0814249.1 WADSWORTH OHIO MUNICIPAL WELL 7 (MD-10), DEPTH 227 FT., WATER BEARING FORMATION SANDSTONE								
JUNE 4, 1971..	0	0	--	0	--	2	3	--
MIAMI COUNTY--Continued								
400215N0841136.1 TROY OHIO MUNICIPAL WELL NO. 2 (MI-15), DEPTH 55 FT., WATER BEARING FORMATION SANDSTONE								
NOV. 27 1970..	0	--	0	--	0	70	--	30
AUG. 18 1971..	0	--	0	--	6	4	--	30
MONTGOMERY COUNTY--Continued								
[illegible].1 MIAMISBURG OHIO BOX BOARD CO., WELL 2 (MT-63), DEPTH 65 FT., WATER BEARING FORMATION SAND AND GRAVEL								
DEC. 22 1970..	0	--	0	--	20	100	--	160
AUG. 18 1971..	0	--	0	--	16	3	--	20
MUSKINGUM COUNTY--Continued								
[illegible].1 ZANESVILLE OHIO MUNICIPAL WELL 6 (MU-10), DEPTH 65 FT., WATER BEARING FORMATION SAND AND GRAVEL								
MAY 19 1971..	0	0	--	0	--	5	16	--
PICKAWAY COUNTY--Continued								
[illegible].1 CIRCLEVILLE OHIO PITTS.PLATE GLASS CO., WELL (PK-21), DEPTH 1[illegible]0 FT., WATER BEARING FORMATION SAND AND GRAVEL								
MAY 25, 1971..	0	--	--	0	--	6	11	--

DETERMINATIONS OF HEAVY METALS

DATE	ARSENIC (AS) (UG/L)	CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	COPPER (CU) (UG/L)	LEAD (PB) (UG/L)	NICKEL (NI) (UG/L)	ZINC (ZN) (UG/L)
RICHLAND COUNTY--Continued								
404100N0823505.1 LEXINGTON OHIO STEVENS MFG. CO., WELL (R-10), DEPTH 168 FT., WATER BEARING FORMATION SANDSTONE								
JUNE 8. 1971..	0	0	--	0	--	2	4	--
TUSCARAWAS COUNTY--Continued								
403210N0812931.1 DOVER OHIO MUNICIPAL WELL 7 (TU-10), DEPTH 103 FT., WATER BEARING FORMATION SAND AND GRAVEL								
JUNE 4, 1971..	0	0	--	0	--	2	5	--
WILLIAMS COUNTY--Continued								
412853N0843220.1 BRYAN OHIO MUNICIPAL WELL 4 (WM-10), DEPTH 147 FT., WATER BEARING FORMATION SAND AND GRAVEL								
MAY 20, 1971..	0	0	--	0	--	0	3	--

PARTIAL-RECORD SUSPENDED-SEDIMENT STATIONS IN THE OHIO RIVER BASIN

LITTLE BEAVER CREEK BASIN

03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OHIO (LAT 40°40'33", LONG 80°32'27")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
26...	1115	10.5	257	16	11
NOV.					
24...	1145	.0	575	4	6.2
DEC.					
28...	1045	.0	489	2	2.6
JAN.					
25...	1225	.0	291	6	4.7
FEB.					
24...	1230	1.5	3180	124	1070
MAR.					
25...	1210	2.5	735	2	4.0
APR.					
26...	1040	9.0	188	0	.00
MAY					
25...	1115	17.5	225	11	6.7
JUNE					
25...	1115	22.5	188	42	21
JULY					
26...	1110	23.0	100	10	2.7
AUG.					
25...	1010	19.0	58	6	.94
SEP.					
23...	1300	17.5	134	5	1.8
27...	1050	17.0	79	6	1.3

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
APR., 1970											
24...	1030	26	39	53	66	86	93	96	98	99	100

YELLOW CREEK BASIN

03110000 YELLOW CREEK NEAR HAMMONDSVILLE, OHIO (LAT 40°32'16", LONG 80°43'31")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
26...	1340	13.0	98	8	2.1
DEC.					
28...	1330	.0	191	26	13
FEB.					
24...	1605	3.0	765	115	238
APR.					
26...	1415	9.5	53	4	.57
JUNE					
25...	1420	26.5	21	2	.11
AUG.					
25...	1320	20.0	6.9	0	.00
SEP.					
23...	1200	16.0	19	2	.08
27...	1350	18.5	11	7	.21

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR., 1970										
24...	1655	26	36	45	62	73	91	94	95	100

YELLOW CREEK BASIN--Continued

03110000 YELLOW CREEK NEAR HAMMONDSVILLE, OHIO (LAT 40°32'16", LONG 80°43'31")--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG., 1970												
12...	1610	1	0	0	3	81	98	99	100	--	--	--
12...	1612	1	0	0	1	3	6	8	14	23	40	100
12...	1614	1	8	15	36	67	73	74	76	80	87	100
SEP.												
25...	1020	2	0	0	2	27	42	49	55	65	78	87
25...	1022	1	0	1	3	8	13	17	26	46	84	100
SEP., 1971												
23...	1200	1	0	0	2	17	20	21	26	34	50	67
23...	1205	1	0	0	2	26	30	32	36	44	58	78

SHORT CREEK BASIN

03111500 SHORT CREEK NEAR DILLONVALE, OHIO (LAT 40°11'36", LONG 80°44'04")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV.					
18...	1245	7.0	158	106	45
JAN.					
22...	1020	.0	99	78	21
MAR.					
10...	1030	2.5	272	72	53
MAY					
10...	1345	14.5	244	98	65
JULY					
06...	1135	22.0	45	38	4.6
AUG.					
26...	1050	19.0	81	2020	442
SEP.					
22...	1000	16.0	36	25	2.4

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP., 1970												
25...	0912	3	1	1	3	9	12	16	22	33	60	100
SEP., 1971												
22...	1000	1	1	1	4	12	16	20	25	35	69	100
22...	1005	1	0	0	3	11	14	18	25	36	58	79

CAPTINA CREEK BASIN

03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OHIO (LAT 39°54'31", LONG 80°55'27")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV.					
09...	1040	9.0	130	5	1.8
JAN.					
13...	1155	1.0	109	3	.88
MAR.					
03...	1105	1.5	182	2	.98
MAY					
05...	1125	14.5	27	5	.36
JUNE					
23...	1115	24.5	10	16	.44
AUG.					
10...	1130	24.0	1.1	13	.04
SEP.					
15...	1120	18.5	140	24	9.1
22...	1700	19.5	71	4	.77

CAPTINA CREEK BASIN--Continued

03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OHIO (LAT 39°54'31", LONG 80°55'27")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
MAR., 1970										
05...	1045	31	47	63	79	88	92	95	98	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP., 1970												
24...	1320	3	0	0	1	3	5	8	18	33	52	100
SEP., 1971												
22...	1700	1	0	0	0	4	8	12	17	25	44	81
22...	1705	1	0	0	0	3	6	9	15	21	41	77

LITTLE MUSKINGUM RIVER BASIN

03115400 LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OHIO (LAT 39°33'47", LONG 81°12'14")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
19...	1430	10.5	152	8	3.3
JAN.					
13...	1520	1.5	149	6	2.4
MAR.					
03...	1445	4.0	257	6	4.2
MAY					
05...	1435	12.5	49	9	1.2
JUNE					
24...	1130	22.0	9.3	12	.30
AUG.					
19...	1145	22.0	2.4	4	.03
SEP.					
15...	1430	20.0	242	40	26
22...	1500	18.0	147	30	12

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP., 1970												
24...	1520	1	1	1	6	58	92	96	96	100	--	--
24...	1522	1	1	2	5	16	29	39	56	78	100	--
24...	1525	1	2	4	11	69	79	87	94	100	--	--
SEP., 1971												
22...	1500	1	0	0	1	6	12	15	21	31	78	100
22...	1505	1	0	1	2	9	14	18	25	33	44	100

MUSKINGUM RIVER BASIN

03116200 CHIPPEWA CREEK AT EASTON, OHIO (LAT 40°56'47", LONG 81°44'35")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.					
06...	1115	15.5	20	51	2.8
13...	1020	17.0	614	339	562
DEC.					
03...	1250	7.0	144	76	30
JAN.					
25...	1120	1.5	40	33	3.6
FEB.					
23...	1430	.5	1430	171	660
MAR.					
23...	1350	2.5	272	39	29
MAY					
18...	1005	20.0	60	24	3.9
JULY					
06...	1245	24.0	10	18	.49
SEP.					
20...	1350	20.0	17	42	1.9

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
JUNE, 1970											
15...	1430	45	63	78	89	95	99	100	--	--	--
OCT.											
13...	1020	48	64	73	84	92	98	100	--	--	--
FEB., 1971											
23...	1430	68	74	78	84	88	90	92	94	98	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM
AUG., 1970						
11...	1100	48	65	87	99	100

03117500 SANDY CREEK AT WAYNESBURG, OHIO (LAT 40°40'21", LONG 81°15'36")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.					
08...	1315	14.5	47	7	.89
NOV.					
03...	1245	12.0	1130	213	650
DEC.					
01...	1500	9.0	554	37	55
08...	1355	2.5	388	16	17
JAN.					
12...	1230	3.0	210	6	3.4
FEB.					
08...	1430	.0	262	32	23
MAR.					
09...	1415	5.0	707	60	115
APR.					
02...	1340	9.0	295	22	18
07...	1315	8.0	196	12	6.4
MAY					
04...	1300	11.5	110	8	2.4
JUNE					
08...	1330	21.0	68	6	1.1
AUG.					
03...	1330	21.5	30	18	1.7
09...	1300	20.5	33	12	1.1
31...	1415	21.0	20	25	1.3
SEP.					
09...	1110	20.0	25	10	.67
29...	1400	17.0	25	4	.30

MUSKINGUM RIVER BASIN--Continued

03117500 SANDY CREEK AT WAYNESBURG, OHIO (LAT 40°40'21", LONG 81°15'36")--Continued

PARTICLE-SZIE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG., 1970												
10...	1650	2	0	0	1	10	15	22	30	47	67	100
10...	1655	1	0	1	3	15	21	28	38	49	65	74
SEP., 1971												
23...	1430	1	0	1	3	13	19	25	34	49	64	100

03123000 SUGAR CREEK ABOVE BEACH CITY DAM, AT BEACH CITY, OHIO (LAT 40°39'24", LONG 81°34'37")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
23...	1030	3.0	95	10	2.6
JAN.					
28...	1440	.0	48	6	.78
FEB.					
26...	1530	4.0	466	103	130
APR.					
21...	1030	13.5	44	20	2.4
JUNE					
17...	1345	21.5	24	48	3.1
AUG.					
12...	1025	19.0	13	42	1.5
SEP.					
14...	1340	19.0	62	82	14
23...	1600	18.0	15	62	2.5

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG., 1970												
10...	1630	2	1	2	4	8	14	26	38	53	72	72
SEP., 1971												
23...	1600	1	0	0	0	1	3	6	10	15	25	63

03137000 KOKOSING RIVER AT MILLWOOD, OHIO (LAT 40°23'51", LONG 82°17'09")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
MAR.					
05...	1300	1.0	547	24	35
APR.					
16...	1100	10.0	233	5	3.1
JUNE					
22...	1300	23.0	120	7	2.4
AUG.					
05...	1600	21.0	86	7	1.6
SEP.					
20...	1145	18.0	65	5	.88
28...	1030	20.5	66	6	1.1

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG., 1970												
[illegible]	[illegible]	[illegible]	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	100
SEP., 1971												
[illegible]	[illegible]	1	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	100
[illegible]	[illegible]	[illegible]	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUSKINGUM RIVER BASIN--Continued

03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OHIO (LAT 40°07'57", LONG 82°08'53")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
19...	1230	6.0	165	6	2.7
DEC.					
24...	1430	1.0	460	16	20
MAR.					
01...	1430	2.0	307	34	28
APR.					
20...	1630	15.0	49	7	.93
JUNE					
09...	1340	19.5	89	20	4.8
AUG.					
06...	1130	19.0	12	6	.19
SEP.					
29...	1420	22.0	9.2	4	.10

03146000 NORTH FORK LICKING RIVER AT UTICA, OHIO (LAT 40°13'41", LONG 82°27'06")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
18...	1200	6.0	32	12	1.0
DEC.					
30...	1150	.5	46	4	.50
FEB.					
05...	1030	1.5	1040	993	2800
23...	1100	3.0	1150	254	789
APR.					
27...	1330	10.5	18	10	.49
JUNE					
09...	1030	19.0	57	80	12
JULY					
13...	1315	23.0	12	25	.81
AUG.					
06...	1300	21.0	5.8	24	.38
12...	0830	20.5	4.5	38	.46
SEP.					
08...	1300	23.0	2.6	17	.12
23...	1000	16.0	3.2	19	.16
24...	1100	16.0	2.2	12	.07

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
FEB.										
05...	1030	21	33	50	69	83	95	97	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1966 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG., 1970												
[illegible]...	1130	2	1	1	4	13	28	53	63	74	87	100
[illegible]...	1135	1	4	10	17	36	67	75	85	91	100	---
[illegible], 1970												
[illegible]...	1100	1	1	1	3	4	8	13	25	44	65	90

PARTIAL-RECORD SUSPENDED-SEDIMENT STATIONS IN THE OHIO RIVER BASIN

SHADE RIVER BASIN

03159540 SHADE RIVER NEAR CHESTER, OHIO (LAT 39°03'49", LONG 81°52'55")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV.					
19...	1100	6.0	112	12	3.6
DEC.					
23...	1330	--	2020	195	1060
JAN.					
12...	1530	.5	103	5	1.4
MAR.					
09...	1210	2.0	235	43	27
MAY					
04...	1220	12.5	64	10	1.7
JUNE					
24...	1325	23.0	7.2	8	.16
AUG.					
12...	1425	22.0	22	16	.95
SEP.					
22...	1300	17.5	21	18	1.0

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
APR., 1970											
02...	1625	52	68	83	94	98	99	100	--	--	--
DEC.											
23...	1330	50	61	78	89	95	97	98	98	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP., 1970												
24...	1130	1	3	5	24	78	97	100	--	--	--	--
24...	1135	1	23	34	59	64	65	65	68	76	82	100
SEP., 1971												
22...	1300	1	1	1	3	11	16	18	23	36	58	92
22...	1305	1	0	0	1	2	2	2	4	8	22	55

RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO (LAT 38°52'25", LONG 82°21'22")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV.					
27...	1210	3.5	384	14	11
FEB.					
19...	1200	4.0	1110	34	102
26...	1500	4.5	4230	40	457
MAR.					
12...	1130	4.5	1650	46	205
MAY					
04...	1135	11.0	174	2	.94
JUNE					
30...	1445	--	209	0	.00
SEP.					
22...	1115	17.5	88	0	.00

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR., 1970										
02...	1500	50	67	82	91	96	97	98	99	100

RACCOON CREEK BASIN--Continued

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO (LAT 38°52'25", LONG 82°21'22")--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP., 1970												
24...	0730	3	1	2	6	66	97	100	--	--	--	--
SEP., 1971												
22...	1115	1	0	1	1	4	6	7	10	14	20	77
22...	1120	1	0	1	10	86	100	--	--	--	--	--

SCIOTO RIVER BASIN

03223000 OLENTANGY RIVER AT CLARIDON, OHIO (LAT 40°34'58", LONG 82°59'20")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
02...	1230	12.0	24	40	2.6
06...	1135	7.5	44	28	3.3
DEC.					
18...	1000	3.0	169	10	4.6
FEB.					
05...	1430	.5	--	445	--
22...	1440	2.5	1250	376	1270
MAR.					
05...	1145	1.0	117	16	5.1
APR.					
05...	0955	5.0	70	18	3.4
12...	1245	14.0	36	22	2.1
MAY					
07...	1025	13.0	1280	314	1090
JUNE					
07...	0915	22.0	85	66	15
JULY					
07...	1000	--	6.2	52	.87
AUG.					
03...	1330	23.0	6.4	85	1.5
04...	1540	21.5	6.2	147	2.5
SEP.					
08...	1630	26.0	7.1	26	.50
30...	1150	22.0	5.2	28	.39

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR., 1970										
24...	1030	60	71	81	89	96	99	100	--	--
FEB., 1971										
05...	1430	39	58	81	92	95	98	99	100	--
22...	1440	31	51	68	82	93	96	97	99	100
MAY										
07...	1025	63	74	83	91	95	98	100	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG., 1970												
10...	1230	1	2	3	4	7	10	19	44	58	80	100

SCIOTO RIVER BASIN--Continued

03228805 ALUM CREEK AT AFRICA, OHIO (LAT 40°10'56", LONG 82°57'42")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.					
22...	1330	15.0	4.3	36	.42
NOV.					
30...	1200	--	8.2	17	.38
DEC.					
21...	1335	1.0	29	2	.16
JAN.					
04...	1300	4.0	232	117	73
FEB.					
06...	1745	.5	188	150	76
12...	1045	.0	34	12	1.1
22...	1230	1.5	1520	622	2550
MAR.					
06...	1600	3.0	130	798	280
APR.					
01...	1010	8.0	37	19	1.9
06...	1430	8.0	35	14	1.3
20...	1445	17.5	19	26	1.3
MAY					
08...	1315	12.0	776	114	239
11...	1330	15.0	100	28	7.6
JUNE					
09...	1015	20.0	23	62	3.9
AUG.					
31...	1530	24.0	2.4	72	.47

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
FEB.									
22...	1230	35	50	63	76	85	92	98	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG., 1970												
10...	1100	2	1	2	4	12	20	29	37	47	62	100

SCIOTO RIVER BASIN--Continued

03230500 BIG DARBY CREEK AT DARBYVILLE, OHIO (LAT 39°42'03", LONG 83°06'35")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.					
21...	0930	12.5	39	29	3.1
30...	1120	14.0	36	42	4.1
NOV.					
17...	1125	5.0	51	20	2.8
DEC.					
14...	0945	4.0	215	17	9.9
22...	1530	1.0	470	178	226
JAN.					
25...	1045	2.5	100	8	2.2
FEB.					
03...	1110	.0	74	5	1.0
22...	1030	3.0	3590	764	7410
24...	1005	2.0	5170	207	2890
MAR.					
29...	0945	9.0	360	14	14
APR.					
05...	1125	8.5	226	25	15
28...	1000	13.5	119	14	4.5
MAY					
19...	1[illegible]0	22.0	211	10	5.7
JUNE					
07...	1255	25.0	90	18	4.4
15...	1045	25.5	75	46	9.8
JULY					
19...	1500	25.0	65	49	8.6
21...	1020	22.0	56	50	7.6
AUG.					
23...	0920	22.5	32	42	3.6
SEP.					
21...	1450	18.5	182	95	47
28...	1115	20.5	72	44	8.6

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
DEC.									
22...	1530	57	73	80	90	96	99	99	100
FEB.									
22...	1030	44	61	72	84	90	98	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP., 1971												
21...	1450	1	0	0	2	6	9	17	26	33	39	100
21...	1455	1	0	1	3	10	15	19	24	28	39	100

03230800 DEER CREEK AT MOUNT STERLING, OHIO (LAT 39°42'54", LONG 83°15'26")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.					
21...	0855	12.0	20	24	1.3
29...	1315	15.0	15	26	1.1
NOV.					
17...	1100	5.0	36	2	.19
DEC.					
08...	1250	3.0	25	2	.13
14...	0915	4.0	88	18	4.3
JAN.					
25...	1015	1.0	50	6	.81
FEB.					
22...	1115	3.0	3460	1060	9900
24...	0940	2.5	975	114	300
MAR.					
29...	1020	8.0	168	32	15
APR.					
28...	0920	13.0	57	28	4.3
MAY					
19...	1000	22.0	81	11	2.4
28...	1100	16.0	65	22	3.9
JUNE					
15...	1015	26.0	158	63	27
JULY					
12...	1250	24.0	97	37	9.7
21...	0945	21.5	41	40	4.4
AUG.					
23...	0945	22.5	21	29	1.6
SEP.					
21...	1330	18.0	143	76	29
22...	1100	16.0	86	41	9.5
28...	1045	20.5	57	38	5.8

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
FEB.									
22...	1115	50	64	75	87	94	98	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP., 1970												
22...	1010	1	0	1	3	15	37	60	80	100	--	--
22...	1015	2	0	0	0	0	2	4	9	17	32	65
SEP., 1971												
21...	1330	1	0	1	2	6	16	28	41	57	72	100
21...	1335	1	0	0	0	1	4	8	16	23	31	65

SCIOTO RIVER BASIN--Continued

03232000 PAINT CREEK NEAR GREENFIELD, OHIO (LAT 39°22'45", LONG 83°22'32")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
21...	1130	13.0	14	8	.30
NOV.					
02...	1115	12.5	34	36	3.3
DEC.					
10...	1230	6.0	9.7	0	.00
14...	1045	5.0	74	6	1.2
JAN.					
25...	1200	3.5	70	4	.76
FEB.					
03...	1100	5.0	37	6	.60
22...	1320	5.0	4450	1030	12400
MAR.					
29...	1100	10.0	158	6	2.6
30...	1410	8.5	137	8	3.0
APR.					
28...	1125	15.5	38	2	.21
JUNE					
01...	1330	23.0	59	7	1.1
JULY					
14...	1235	23.0	78	50	11
21...	1130	21.5	30	38	3.1
AUG.					
19...	1230	20.0	8.0	8	.17
23...	1045	22.0	8.0	8	.17
SEP.					
21...	1145	17.0	42	36	4.1
22...	1930	18.0	21	14	.79

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
FEB.										
22...	1320	38	60	77	89	96	97	98	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP., 1970												
22...	1340	1	0	3	20	37	49	65	83	95	100	--
SEP., 1971												
21...	1145	1	0	1	3	9	18	27	36	44	61	100
21...	1150	1	1	3	19	41	55	71	86	97	100	--

OHIO BRUSH CREEK BASIN

03237500 OHIO BRUSH CREEK NEAR WEST UNION, OHIO (LAT 38°48'13", LONG 83°25'16"

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
23...	1045	13.0	75	27	5.5
DEC.					
17...	1500	5.0	1570	120	509
JAN.					
22...	1000	.0	174	22	10
FEB.					
05...	1445	3.0	4500	992	12100
APR.					
09...	1300	12.0	120	28	9.1
JUNE					
04...	1300	27.0	52	22	3.1
JULY					
16...	1415	26.0	37	82	8.2
AUG.					
23...	1245	23.0	83	120	27
SEP.					
21...	1445	20.5	156	38	16
24...	1205	18.0	87	28	6.6

OHIO BRUSH CREEK BASIN--Continued

03237500 OHIO BRUSH CREEK NEAR WEST UNION, OHIO (LAT 38°48'13", LONG 83°25'16")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
MAR., 1970										
05...	1055	34	49	64	78	95	97	99	99	100
FEB., 1971										
05...	1445	24	34	48	62	88	97	100	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP., 1970												
23...	1820	2	0	0	1	6	9	11	16	27	46	68
SEP., 1971												
21...	1445	1	0	0	0	0	1	4	8	15	31	70
21...	1447	1	0	0	0	2	4	8	15	20	39	64

WHITEOAK CREEK BASIN

03238500 WHITEOAK CREEK NEAR GEORGETOWN, OHIO (LAT 38°50'42", LONG 83°55'16")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
DEC.					
22...	1450	8.0	3500	643	6080
FEB.					
19...	1400	4.0	1040	115	323
22...	1330	--	7670	1680	34800
APR.					
08...	1400	12.0	44	12	1.4
JUNE					
10...	1145	21.0	57	250	38
JULY					
30...	1330	22.5	101	96	26
SEP.					
17...	1240	20.5	71	21	4.0
21...	1300	20.0	51	8	1.1

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
MAR., 1970											
05...	1820	66	71	85	92	97	98	99	100	--	--
DEC.											
22...	1450	42	54	67	81	95	97	98	99	100	--
FEB., 1971											
22...	1330	30	41	53	70	85	91	95	97	98	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP., 1970												
23...	1630	2	0	0	2	7	14	27	49	64	75	100
SEP., 1971												
21...	1300	1	0	0	0	3	11	25	48	69	94	100
21...	1305	1	0	0	0	0	1	4	11	20	25	71

LITTLE MIAMI RIVER BASIN

03246200 EAST FORK LITTLE MIAMI RIVER NEAR MARATHON, OHIO (LAT 39°06'52", LONG 84°01'29")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.					
29...	1520	15.0	13	16	.56
DEC.					
22...	1440	5.5	2480	659	4410
JAN.					
21...	1150	.0	56	16	2.4
MAR.					
31...	1500	11.5	50	50	6.7
APR.					
29...	1245	14.0	16	28	1.2
JUNE					
08...	1510	24.0	209	464	262
10...	0930	20.5	68	126	23
JULY					
20...	1300	23.5	76	114	23
29...	1400	23.0	140	288	109
SEP.					
01...	1245	23.5	37	64	6.4
16...	1505	20.0	74	62	12
21...	1115	17.5	239	73	47

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OF OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
MAY , 1970									
14...	1305	75	87	93	98	100	--	--	--
DEC.									
22...	1440	46	58	71	83	89	98	99	100
JUNE, 1971									
08...	1510	73	89	96	98	98	99	100	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP., 1970												
23...	1410	1	58	75	86	89	90	90	94	100	--	--
SEP., 1971												
21...	1115	1	0	0	1	3	4	5	7	11	31	52
21...	1120	1	1	1	4	9	10	11	13	16	31	86

GREAT MIAMI RIVER BASIN

03262700 GREAT MIAMI RIVER AT TROY, OHIO (LAT 40°02'25", LONG 84°11'52")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.					
14...	1030	20.0	93	10	2.5
NOV.					
12...	1010	12.5	80	12	2.6
DEC.					
21...	1500	3.0	224	4	2.4
FEB.					
03...	1430	.0	68	4	.73
22...	1300	---	8360	645	14600
APR.					
09...	0945	10.0	302	19	15
26...	1505	17.0	230	10	6.2
JUNE					
14...	1550	27.5	146	26	10
JULY					
13...	1550	25.5	410	74	82
AUG.					
10...	1530	26.0	92	12	3.0
SEP.					
22...	1605	--	135	16	5.8
27...	1515	22.0	225	24	15

GREAT MIAMI RIVER BASIN--Continued

03262700 GREAT MIAMI RIVER AT TROY, OHIO (LAT 40°02'25", LONG 84°11'52")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SEC. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
FEB.									
22...	1300	42	51	60	71	82	89	96	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM
SEP., 1970										
21...	1035	1	14	18	36	90	98	98	99	100

03264000 GREENVILLE CREEK NEAR BRADFORD, OHIO (LAT 40°06'08", LONG 84°25'48")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SECI-MENT DIS-CHARGE (T/DAY)
NOV.					
18...	1215	4.0	30	6	.49
DEC.					
22...	1320	3.0	158	37	16
JAN.					
21...	1115	.0	33	2	.18
FEB.					
22...	1015	--	1680	444	2010
MAR.					
17...	1100	3.5	344	45	42
APR.					
27...	1600	13.0	53	9	1.3
JUNE					
15...	1400	22.5	61	34	5.6
JULY					
14...	1340	23.0	30	27	2.2
AUG.					
05...	1515	22.0	24	18	1.2
SEP.					
14...	0930	17.5	18	32	1.6
22...	1330	17.0	39	32	3.4
27...	1115	18.0	49	28	3.7

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
FEB.									
22...	1015	57	71	77	87	96	98	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
SEP., 1970											
22...	1815	3	6	8	12	26	52	80	91	94	100
SEP., 1971											
22...	1330	3	41	51	63	78	94	99	99	100	--

PARTIAL-RECORD SUSPENDED-SEDIMENT STATIONS IN THE OHIO RIVER BASIN

GREAT MIAMI RIVER BASIN--Continued

03267000 MAD RIVER NEAR URBANA, OHIO (LAT 40°06'27", LONG 83°47'57")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV. 16...	1030	3.5	62	11	1.8
DEC. 21...	1110	3.0	71	2	.38
FEB. 03...	1040	.0	74	20	4.0
APR. 26...	1120	11.0	85	22	5.0
JUNE 14...	1035	19.0	70	70	13
JULY 13...	1000	17.5	75	10	2.0
AUG. 10...	1010	18.5	51	19	2.6
SEP. 02...	1015	18.0	46	11	1.4
23...	0900	14.0	44	6	.71
28...	1510	19.0	57	19	2.9

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR., 1970 02...	1320	42	54	64	74	84	90	94	97	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP., 1970 21...	1300	3	--	1	2	5	9	15	25	37	58	87
SEP., 1971 23...	0900	1	0	0	0	2	3	6	10	19	38	71

03271800 TWIN CREEK NEAR INGOMAR, OHIO (LAT 39°42'28", LONG 84°31'30")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT. 06...	1535	19.0	7.6	9	.18
NOV. 24...	1600	1.0	17	2	.09
DEC. 15...	1120	2.0	32	1	.09
JAN. 12...	1130	1.0	50	22	3.0
MAR. 11...	1010	3.0	167	4	1.8
APR. 29...	1525	12.0	46	6	.75
MAY 28...	1220	13.5	85	46	11
JUNE 28...	1310	28.0	21	46	2.6
JULY 27...	1520	24.0	17	44	2.0
AUG. 26...	1040	20.0	8.0	14	.30
SEP. 22...	1200	16.0	9.3	4	.10

GREAT MIAMI RIVER BASIN--Continued

03271800 TWIN CREEK NEAR INGOMAR, OHIO (LAT 39°42'28", LONG 84°31'30")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR., 1970 22...	1230	51	65	73	81	88	93	96	98	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEPT.,1970 23...	0900	3	0	0	1	4	6	9	13	19	32	52
SEPT.,1971 22...	1200	1	0	0	1	3	6	8	11	13	27	77
22...	1205	1	0	1	7	34	56	76	88	91	94	100
Sept. 22...	1210	1	0	1	3	13	18	27	47	66	75	100

03272800 SEVENMILE CREEK AT COLLINSVILLE, OHIO (LAT 39°31'23", LONG 84°36'39")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 08...	1445	18.0	7.7	12	.25
NOV. 27...	1250	8.0	33	14	1.2
DEC. 08...	1235	4.0	29	2	.16
JAN. 12...	1445	3.0	56	10	1.5
MAR. 11...	1330	5.0	146	6	2.4
APR. 20...	1415	20.0	35	18	1.7
MAY 25...	1350	15.0	204	697	384
JUNE 25...	1140	21.0	19	54	2.8
JULY 29...	1525	25.0	51	31	4.3
AUG. 26...	1225	21.0	7.1	22	.42
SEP. 22...	1030	14.5	7.1	12	.23

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
MAY 25...	1350	70	86	93	98	99	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEPT.,1970 23...	1045	1	0	1	2	9	12	18	27	43	63	87
SEPT.,1971 22...	1030	1	0	0	1	3	6	13	28	55	97	100

STREAMS TRIBUTARY TO LAKE ERIE

04185000 TIFFIN RIVER AT STRYKER, OHIO (LAT 41°30'17", LONG 84°25'49")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
DEC.					
02...	1355	7.5	1400	55	208
MAR.					
02...	1210	2.0	1250	60	202
MAY					
26...	1100	--	203	44	24
JUNE					
16...	1550	24.0	255	306	211
JULY					
07...	1540	26.0	40	349	38
AUG.					
11...	1050	23.0	17	241	11
19...	1225	24.0	11	132	3.9
SEP.					
24...	0930	14.0	16	103	4.4

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
DEC.								
02...	1355	86	87	90	94	98	98	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG., 1970												
12...	1130	1	37	52	78	94	96	97	97	100	--	--
SEPT.,1971												
24...	0930	1	32	43	56	75	84	92	96	100	--	--

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO (LAT 40°56'55", LONG 84°15'58")

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
03...	1515	10.0	19	16	.82
DEC.					
03...	1405	9.0	31	42	3.5
29...	1500	.0	56	80	12
MAR.					
04...	1655	2.5	107	14	4.0
APR.					
20...	1040	5.0	37	50	5.0
MAY					
07...	1555	13.5	1200	171	554
25...	1930	—	2100	1180	6690
JUNE					
15...	1345	26.0	118	113	36
AUG.					
12...	1610	25.0	36	126	12
SEP.					
23...	1400	18.0	107	110	32

STREAMS TRIBUTARY TO LAKE ERIE--Continued

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO (LAT 40°56'55", LONG 84°15'58")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
APR., 1970								
03...	1105	79	88	93	97	98	99	100
MAY , 1971								
25...	1930	66	84	93	98	99	100	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEPT.,1970												
23...	1200	2	0	0	1	5	8	21	56	87	100	--

04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO (LAT 41°03'21", LONG 83°41'17")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV.					
06...	1320	11.0	17	8	.37
09...	1400	13.0	17	42	1.9
DEC.					
04...	1230	6.5	30	32	2.6
18...	1630	4.0	100	20	5.4
JAN.					
08...	0920	.0	40	20	2.2
FEB.					
05...	1700	.5	1570	464	1970
MAR.					
05...	1340	3.0	130	12	4.2
10...	1745	--	306	22	18
APR.					
05...	1215	7.0	66	12	2.1
12...	1540	8.5	61	17	2.8
MAY					
07...	1250	11.5	1540	150	624
25...	1715	19.5	2900	1070	8380
27...	1025	12.0	720	176	342
JUNE					
07...	1100	--	161	68	30
22...	1345	25.5	32	39	3.4
JULY					
07...	1545	29.0	16	54	2.3
AUG.					
04...	1230	22.0	14	46	1.7
06...	1255	24.5	13	66	2.3
SEP.					
08...	1415	26.0	12	22	.71
15...	1215	21.0	9.8	18	.48
24...	1300	17.5	11	34	1.0
30...	0845	22.0	11	19	.56

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
JUNE, 1970								
03...	1820	71	87	94	97	99	99	100
FEB., 1971								
05...	1700	73	78	87	95	98	99	100
MAY								
07...	1250	72	85	88	94	97	98	100
25...	1715	72	89	95	98	99	100	--

STREAMS TRIBUTARY TO LAKE ERIE--Continued

04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO (LAT 41°03'21", LONG 83°41'17")--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM- PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEPT.,1970												
23...	1330	2	0	0	2	5	7	10	16	25	38	58
SEPT.,1971												
24...	1300	1	1	2	8	38	52	67	84	95	100	—
24...	1302	1	0	0	1	3	4	6	10	15	36	69
24...	1305	1	0	1	6	42	75	94	100	—	—	—

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OHIO (LAT 41°14'15", LONG 84°23'57")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT.					
05...	1440	16.0	88	30	7.1
NOV.					
05...	0820	10.0	126	14	4.8
DEC.					
02...	1630	7.5	1150	139	432
MAR.					
23...	1330	2.5	2420	40	261
APR.					
21...	0900	13.0	337	34	31
MAY					
26...	1215	--	7840	221	4680
27...	1230	14.5	10100	554	15100
JUNE					
17...	1030	28.5	466	42	53
AUG.					
13...	1110	24.0	170	32	15
SEP.					
15...	0830	22.0	104	28	7.9
21...	1125	18.0	134	38	14
23...	1630	20.0	482	28	36

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
MAY								
26...	1215	72	85	92	97	98	99	100
27...	1230	83	93	96	98	99	99	100

04196000 SANDUSKY RIVER NEAR BUCYRUS, OHIO (LAT 40°48'13", LONG 83°00'21")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
NOV.					
11...	1025	11.0	12	16	.52
JAN.					
05...	1040	.5	458	117	145
MAR.					
02...	1150	6.5	127	51	17
APR.					
14...	1305	11.5	41	14	1.5
JUNE					
09...	1520	20.5	49	62	8.2
AUG.					
03...	1500	23.0	4.4	8	.10
SEP.					
27...	1450	20.5	4.7	4	.05

STREAMS TRIBUTARY TO LAKE ERIE--Continued

04196000 SANDUSKY RIVER NEAR BUCYRUS, OHIO (LAT 40°48'13", LONG 83°00'21")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
APR., 1970									
24...	1210	47	60	69	79	88	96	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEPT.,1970												
22...	1525	1	1	1	4	9	19	34	44	51	61	100

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO (LAT 40°55'22", LONG 83°20'56")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
11...	1430	12.0	2.9	18	.14
JAN.					
05...	1520	.5	60	46	7.5
MAR.					
03...	1200	4.0	230	56	35
APR.					
14...	1005	10.5	30	34	2.8
JUNE					
09...	1300	21.0	26	94	6.6
AUG.					
04...	1300	23.0	3.4	30	.28
[illegible]...	1500	25.0	.10	32	.01
SEP.					
24...	1415	17.0	2.0	16	.09

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
APR., 1970							
24...	1335	77	84	91	96	99	100

04197000 SANDUSKY RIVER NEAR MEXICO, OHIO (LAT 41°02'39", LONG 83°11'42")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
10...	1400	11.0	63	14	2.4
DEC.					
01...	1450	5.0	506	51	70
JAN.					
06...	0940	.0	572	42	65
MAR.					
04...	1015	3.5	649	33	58
APR.					
15...	0950	10.0	217	42	25
JUNE					
09...	1200	20.5	516	326	454
AUG.					
04...	1100	22.0	36	39	3.8
SEP.					
24...	1510	18.5	30	34	2.8
28...	0955	19.0	22	34	2.0

PARTIAL-RECORD SUSPENDED-SEDIMENT STATIONS IN THE ST. LAWRENCE RIVER BASIN

STREAMS TRIBUTARY TO LAKE ERIE--Continued

04197000 SANDUSKY RIVER NEAR MEXICO, OHIO (LAT 41°02'39", LONG 83°11'42")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
JUNE								
09...	1200	69	84	91	95	97	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. FINER THAN .062 MM	BED MAT. SIEVE DIAM. FINER THAN .125 MM	BED MAT. SIEVE DIAM. FINER THAN .250 MM	BED MAT. SIEVE DIAM. FINER THAN .500 MM	BED MAT. SIEVE DIAM. FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. FINER THAN 32.0 MM
SEPT.1971												
24......	1510	1	0	0	5	11	12	17	24	30	33	48
24......	1515	1	0	0	4	13	18	26	37	54	68	100

04199000 HURON RIVER AT MILAN, OHIO (LAT 41°18'06", LONG 82°36'25")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
27...	1135	15.0	29	4	.31
NOV.					
07...	0930	7.5	50	16	2.2
DEC.					
08...	1210	1.0	243	63	41
JAN.					
25...	1210	--	42	6	.68
FEB.					
06...	1145	.5	1450	288	1130
MAR.					
06...	1045	3.0	222	18	11
17...	1125	3.0	666	57	102
APR.					
06...	0835	5.0	104	8	2.2
MAY					
07...	1015	15.5	308	32	27
11...	1110	17.0	95	8	2.1
JUNE					
08...	0930	24.0	62	17	2.8
28...	1105	28.0	17	4	.18
JULY					
06...	1530	--	14	6	.23
AUG.					
03...	1530	24.5	13	6	.21
SEP.					
07...	1050	23.0	7.7	14	.29
07...	1530	27.0	6.3	12	.20

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
FEB.									
06...	1145	82	89	95	97	98	99	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG., 1970												
11...	1600	2	1	2	5	16	28	43	61	79	94	96

STREAMS TRIBUTARY TO LAKE ERIE--Continued

04199500 VERMILION RIVER NEAR VERMILION, OHIO (LAT 41°22'55", LONG 82°19'01")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT.					
27...	1440	15.0	37	5	.50
NOV.					
07...	1115	9.0	98	22	5.8
DEC.					
08...	1455	2.0	82	30	6.6
JAN.					
25...	1450	.0	72	6	1.2
MAR.					
06...	1215	3.0	182	15	7.4
16...	1435	3.0	1060	104	298
APR.					
06...	1045	6.0	82	8	1.8
MAY					
08...	0935	12.5	255	24	17
11...	1445	19.0	127	4	1.4
JUNE					
08...	1120	22.0	78	66	14
28...	1440	26.0	6.0	12	.19
JULY					
06...	1335	30.5	3.2	5	.04
AUG.					
03...	1310	25.0	6.0	5	.08
SEP.					
07...	1305	26.0	1.4	14	.05
07...	1420	24.0	1.4	14	.05

04200500 BLACK RIVER AT ELYRIA, OHIO (LAT 41°22'49", LONG 82°06'17")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT.					
07...	1100	16.0	44	18	2.1
DEC.					
09...	0935	2.0	173	47	22
JAN.					
26...	0945	1.0	39	12	1.3
MAR.					
23...	1350	2.0	733	45	89
MAY					
12...	0945	18.0	149	14	5.6
JUNE					
29...	1020	26.0	63	12	2.0
SEP.					
08...	0930	22.0	6.8	11	.20

04212000 GRAND RIVER NEAR MADISON, OHIO (LAT 41°44'26", LONG 81°02'48")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT.					
07...	1420	17.0	677	45	82
21...	0945	11.5	235	13	8.2
DEC.					
15...	1505	2.5	1680	19	86
FEB.					
03...	1430	.0	120	30	9.7
APR.					
08...	1300	7.0	275	4	3.0
JUNE					
02...	1230	18.0	99	8	2.1
08...	1300	20.5	275	121	90
AUG.					
11...	1130	25.5	2.7	20	.15
31...	1745	24.5	65	30	5.3
SEP.					
14...	1330	19.5	27	24	1.7

STREAMS TRIBUTARY TO LAKE ERIE--Continued

04212000 GRAND RIVER NEAR MADISON, OHIO (LAT 41°44'26", LONG 81°02'48")--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG., 1970												
11...	1640	3	0	0	2	8	18	32	51	66	84	100

04212500 ASHTABULA RIVER NEAR ASHTABULA, OHIO (LAT 41°51'20", LONG 80°45'44")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
07...	1515	17.5	351	23	22
20...	1455	11.5	73	7	1.4
DEC.					
14...	1600	2.0	368	9	8.9
FEB.					
02...	1610	.0	34	4	.37
MAR.					
10...	1300	1.5	159	5	2.1
APR.					
07...	1500	10.0	47	2	.25
JUNE					
02...	1115	17.0	8.2	6	.13
07...	1400	25.5	117	213	67
AUG.					
31...	1830	25.0	4.4	9	.11
SEP.					
15...	0940	16.0	20	4	.22

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, PERIOD OCTOBER 1969 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG., 1970												
12...	0910	3	0	1	1	2	3	6	12	22	45	88

04213000 CONNEAUT CREEK AT CONNEAUT, OHIO (LAT 41°55'37", LONG 80°36'15")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
19...	1705	12.0	202	6	3.3
DEC.					
14...	1305	2.5	662	25	45
FEB.					
02...	1150	.0	96	8	2.1
MAR.					
10...	1145	1.0	302	15	12
APR.					
07...	1255	7.0	115	26	8.1
JUNE					
02...	0830	17.5	35	6	.57
07...	1340	24.0	210	34	19
AUG.					
10...	1315	27.5	6.8	14	.26
SEP.					
01...	1115	20.0	37	4	.40
14...	1545	21.5	26	12	.84

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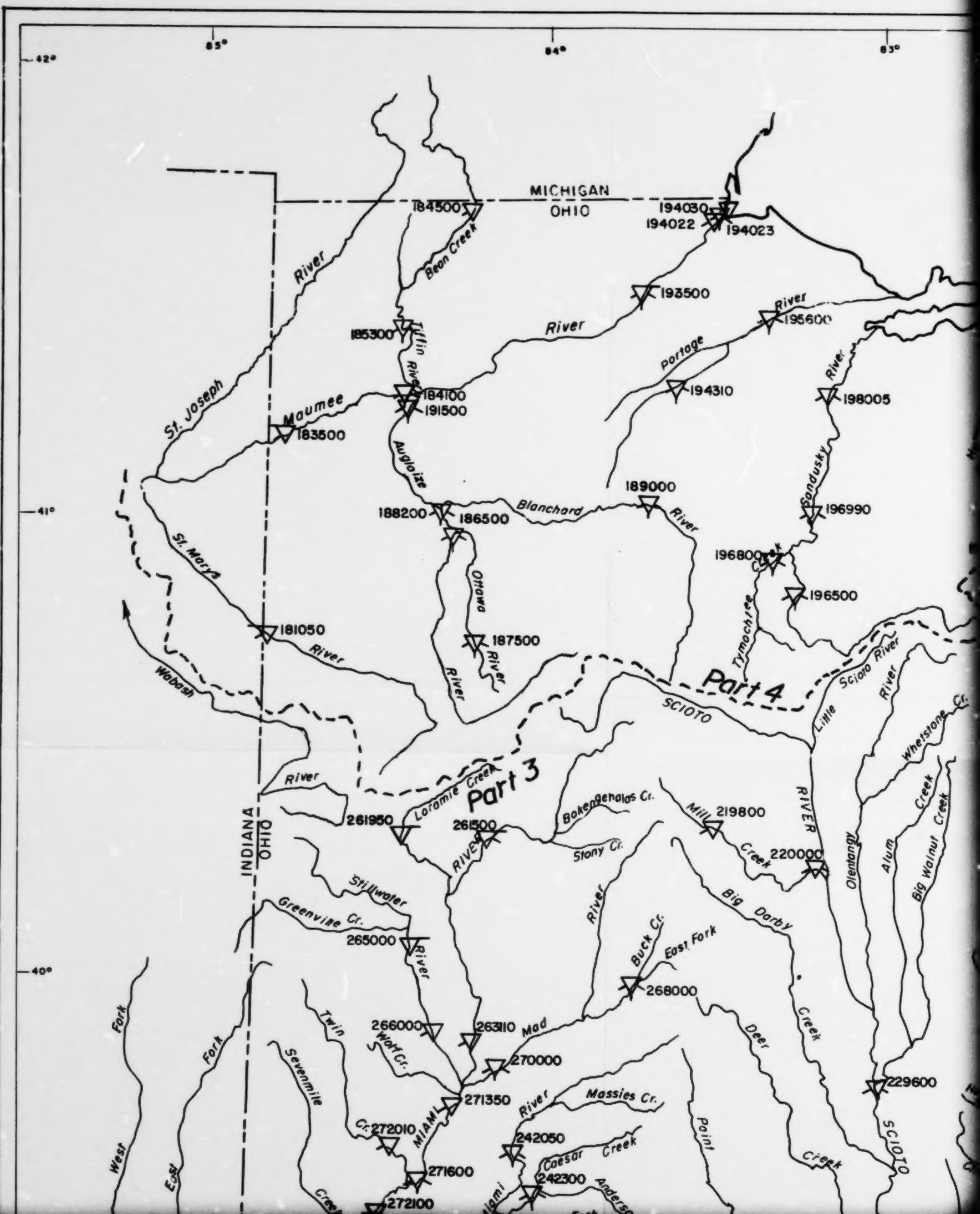
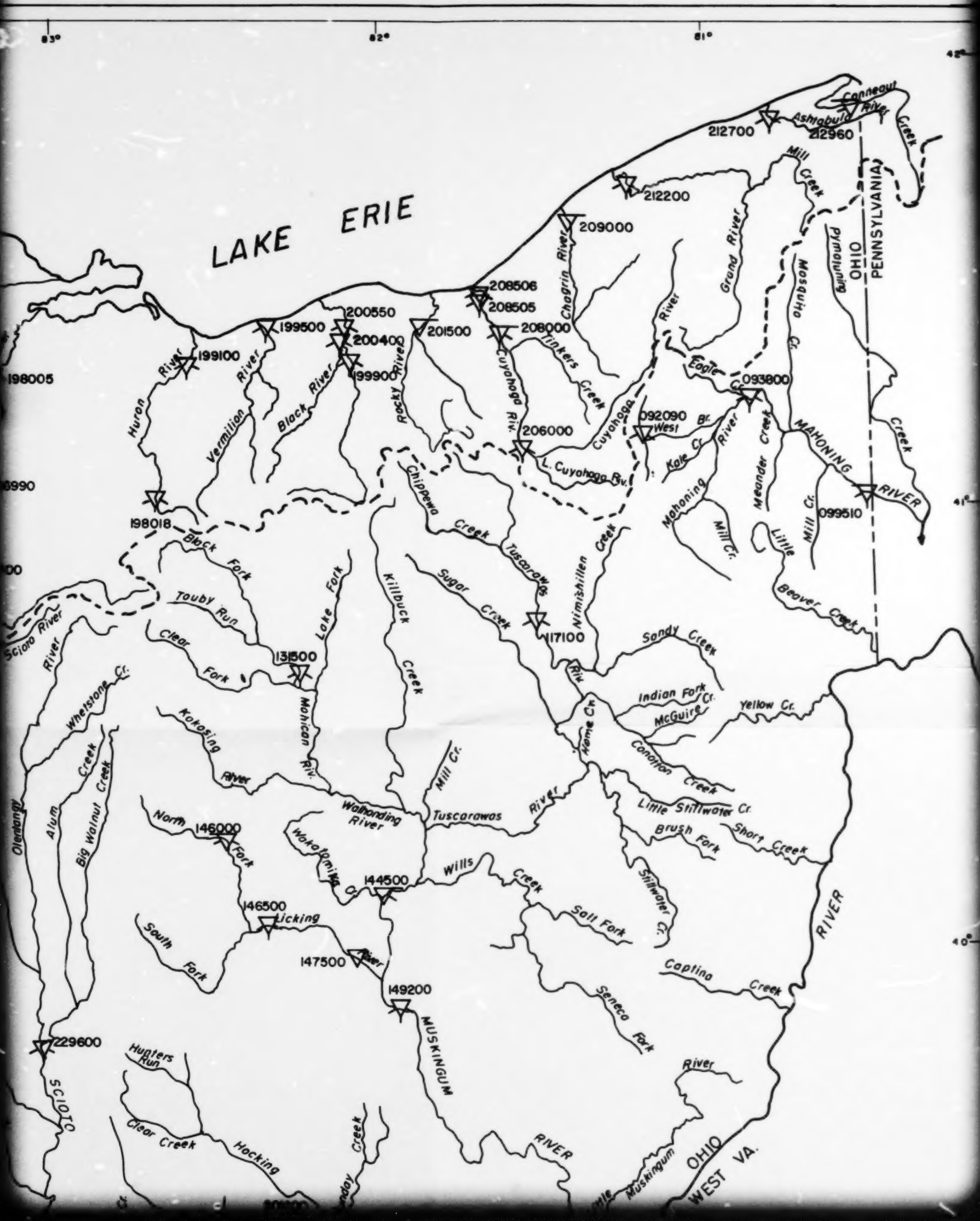
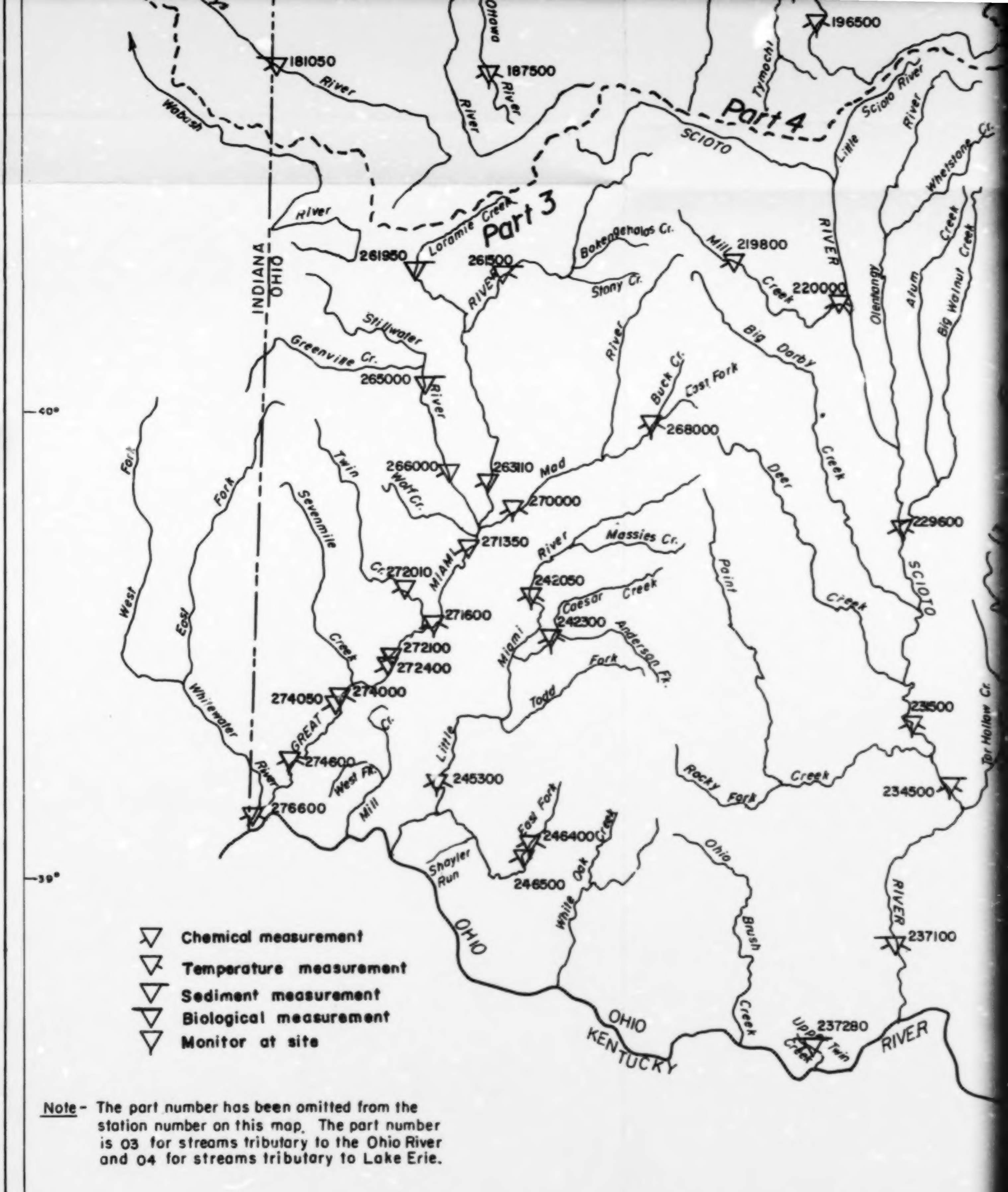

42°
85°
84°
83°
41°
40°
MICHIGAN
OHIO
INDIANA
OHIO
184500
Bean Creek
194030
194022
194023
St. Joseph
River
193500
River
195600
River
Portage
185300
Tiffin
River
184100
191500
Maumee
183500
194310
River
198005
Auglaize
Sandusky
189000
188200
186500
Blanchard
River
196990
St. Marys
196800
Ottawa
196500
Tymochtee
181050
River
187500
River
River
Wabash
Part 4
SCIOTO
Little Scioto River
River
Whetstone Cr.
River
Part 3
Loramie Creek
Bokengehalas Cr.
RIVER
Mill
219800
Creek
261950
261500
RIVER
Stony Cr.
220000
Olentangy
Alum
Creek
Big Walnut Creek
Stillwater
Greenville Cr.
River
Big Darby
265000
River
Buck Cr.
East Fork
268000
West
Fork
Fork
East
Twin
Deer
Creek
266000
263110
Mad
Wolf Cr.
270000
Sevenmile
271350
River
Massies Cr.
229600
MIAMI
Point
Cr.
272010
242050
Caesar Creek
Creek
SCIOTO
271600
242300
Anderson
Creek
272100
Miami
Fork



83°
82°
81°
42°
41°
40°
LAKE ERIE
Conneaut
River
Creek
Ashtabula
212700
212960
Mill
Creek
212200
209000
OHIO
PENNSYLVANIA
Pymatuning
Mosquito Cr.
Grand River
Chagrin River
River
208506
208505
208000
Tinkers Creek
200550
200400
199900
199500
201500
199100
198005
Huron River
Vermilion River
Black River
Rocky River
Cuyahoga Riv.
Cuyahoga
206000
L. Cuyahoga Riv.
092090
West Br.
Eagle Cr.
093800
Kale Cr.
River
Meander Creek
Mahoning
Mill Cr.
MAHONING
RIVER
099510
Creek
Mill Cr.
Little Beaver Creek
198018
Black Fork
Touby Run
Scioto River
River
Clear Fork
131500
Lake Fork
Mohican Riv.
Killbuck Creek
Chippewa Creek
Tuscarawas
Sugar Creek
117100
Nimishillen Creek
Riv.
Sandy Creek
Indian Fork Cr.
McGuire Cr.
Yellow Cr.
Home Cr.
Conotton Creek
Little Stillwater Cr.
Brush Fork
Short Creek
Whetstone Cr.
Alum Creek
Big Walnut Creek
Olentangy
Kokosing River
Mill Cr.
Walhonding River
Tuscarawas River
North Fork
146000
Wakatomika Cr.
144500
Wills Creek
Stillwater Cr.
Salt Fork
146500
Licking River
147500
South Fork
149200
MUSKINGUM
Seneca Fork
Captina Creek
RIVER
229600
SCIOTO
Hunters Run
Clear Creek
Hocking
Creek
RIVER
Muskingum
River
OHIO
WEST VA.



Note - The part number has been omitted from the station number on this map. The part number is 03 for streams tributary to the Ohio River and 04 for streams tributary to Lake Erie.

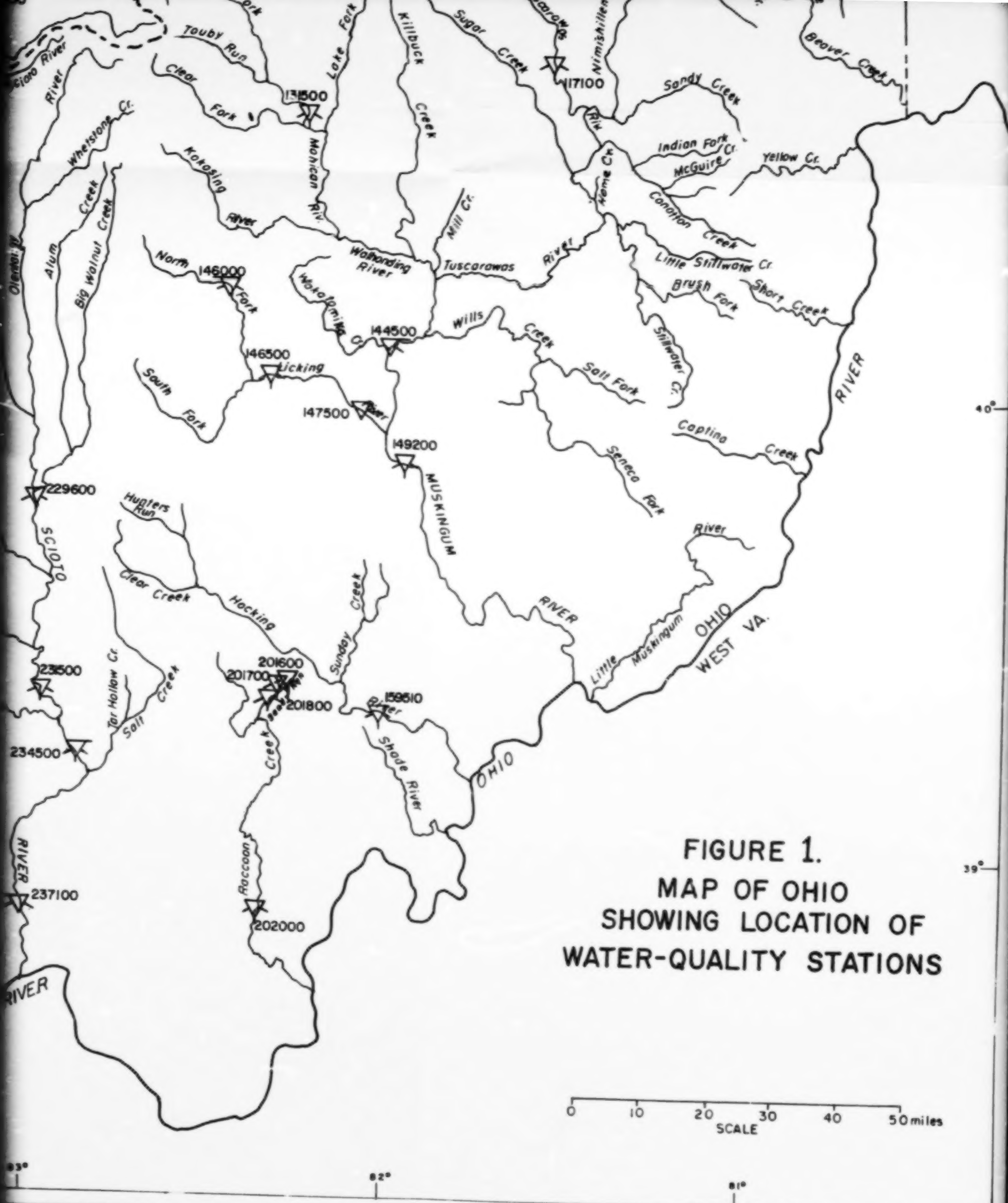


FIGURE 1.
MAP OF OHIO
SHOWING LOCATION OF
WATER-QUALITY STATIONS